

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: kb0rol@juno.com (Bradley L Mugleston)
Subject: [14901] 38 Special HELP
Message-ID: <19970316.210135.2423.0.kb0rol@juno.com>

Help,

Got my 38 Special done, I think, No Smoke, No heat, fuzz in the head phones. OK looks good tune around nothing, touch things to see if they are getting HOT and everything is cool - I touch VR1 - great signal, if your a baseball fan, I've got the ROCKIES coming in loud and clear on AM 830. I play around - if I disconnect my antenna the Rockies go away - so I need my antenna and my body to hear the ball game.

Set up - generic (no mods yet) 38 Special - for an antenna I am using my 40M delta loop for receive - Just wanted to hear something - I guess a ball game is something. I can't seem to get a peak on TC1 with the ball game and tuning doesn't change it at all. What's up? OR is this normal.

Thanks,

Brad Mugleston - KB0ROL
Colorado QRP Club # 170, QRP-L #316, ARRL
QTH - Aurora, CO - DM79oq
KB0ROL@JUNO.COM
BMUG@GWL.COM

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: kd7s@psnw.com (Bill Jones)
Subject: [14914] 38S Calibrated Dial in Radio Shack Case
Message-ID: <199703170521.VAA22797@sierra.psnw.com>

Hello Friends,

Here is a suggestion for those of you putting your 38 Special in the Radio Shack Instrument/Modem case. Instead of using a conventional 100k potentiometer for the tuning control, try substituting a slide pot. A frequency scale made from paper and glued above the control knob could give direct frequency readout. I've used this scheme in other homebrew QRP rigs and it works very well. It is especially useful for low profile cabinets.

Slide pots can be purchased from surplus electronics suppliers for a dollar or two. Try it. I think you'll like the results.

=====

Bill Jones - KD7S <><
Sanger, California
Reply to kd7s@psnw.com
=====

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: mdwatt@usit.net (Marty Watt)
Subject: [14912] 38S debugging contest?
Message-ID: <332dbe32.260020054@smtp.usit.net>

On Sat, 15 Mar 1997 20:47:18 EST, ori@juno.com (Ori K Mizrahi-Shalom) wrote:
I'm still debugging the as-of-yet never working 38 Special. I need help, desperately!

In exchange for the help here, if I can get it functioning, I definitely want to do something nice for everyone. I'm considering two things, and will probably do both:

1. I have started a "consolidated construction manual", with all the mods laid out in final form, that I will make available to all who request it (I'm doing it in anticipation of building another, when the next run of kits start shipping).
2. I understand Mississippi is somewhat easy to work, but difficult to get a QSL card. I will, upon having an operating 38 Special, make a trip to Mississippi and operate on 40 and 30 for an evening, in conjunction with the 50/40/30 operation, unless already spoken for.

I will measure anything I'm capable of measuring. I have a freq. counter, Probe Scope, DMM, and a dummy load.

=46first problem: no receive audio. The rig has the TiCK installed. It has the 5-watt mod installed. This was probably a mistake, I should have built it stock and then modified it later, after I was sure it was working. Oh well.

When checking with Ori's troubleshooting manual:

>General "dead" Transceiver Procedure
>
>(1) apply power briefly and touch all ICs. None should be more than luke
> warm. Anything else and you have a problem around the "hot" chip.

No problem here.

>(2) When any part of the design is suspected "dead" the first step is to
> test all power supply connections (referenced to ground):
> (a) 12V at the power connector
> (b) 8V at all ICs as follows (IC/pin):
> U1/8, U2/14, U3/8, U4/20, U5/8

Looks good.

>(3) Other DC voltages:
> (a) verify about 4V at U5 pins 3 and 5.

OK.

> (b) check the base of TR1 (2N3904, middle pin) as follows:
> about 0.6V on receive (key open)

OK

> about 1.5V on transmit (key down)

By shorting pads 9 and 10 to key the rig, the voltage was 0.7V (half that expected voltage)

> (c) check U2/12, U2/13, U4/1, U4/13, banded side of D6:
> 8V on receive (key open)

OK

> 0V on transmit (key down)

OK

> (d) check U2/5, U2/6, U4/7, banded side of D1 and D2:
> 0V on receive (key open)
> 8V on transmit (key down)

Both OK, except D1 and D2 -- I get 5.15V on the banded end of both on receive, 8.4V on transmit. Paul's chart of voltages differs a bit -- his has 5.0V on D1/D2, and his has the 5-watt mod (like mine). Not sure which is correct at this point. All points got 8.4V on transmit, and 0V (actually 0.057V!) on receive.

> (e) check DC voltage on banded side of D3, while varying the
> tuning pot position for 0-8V voltage range.

No problems here

>Any problem with the DC voltage levels mentioned means you have =
something
>wrong in that area of the board. These tests can be done even with a
>cheap
>analog voltmeter.
>
>(4) verify sidetone with key down. If you hear the sidetone then the
> audio stage is OK and most likely U4 is not faulty.

No sidetone -- TiCK mod already done, no sidetone expected. I'm
keying the transmitter by shorting pads 9/10.

> In general, we found that the ICs are very rugged. Do not remove an
> IC from the board before you have verified all components around it
> first!
>
>Basic Receiver Tests
>
>It is assumed that DC tests checked OK.
>(1) First test that the headphone jack is compatible with the socket.

A given, but always a good check. I've verified hot to tip of
phones socket, and gnd to gnd. I'm using a stereo jack with the
middle pin empty. The headphones are mono/communications type.

>(2) You should hear the sidetone with key down. This tells us that the
> audio amp circuit (U5) is functioning.

As mentioned previously, the TiCK mod is done, so no sidetone is
expected. I will note, however, I have two of U5, both from Mouser
and brand new. Both have been tried in the circuit, to no avail.
Voltages all around the IC's appear good, per Paul's chart.

>(3) If no sidetone heard, the audio amp might be still OK:
> (a) listen with the headphones while touching different places in
> the receive path with a metallic object (screwdriver, etc.). You
> should hear some noise in the headphones (possibly you'll pick
> up a local AM station, due to the high gain):
> U5/2, U5/6

U5/2 produces a little audio when "scratched with the point of my
trusty pocketknife. U5/6 produces nothing. This part is a JRC
device, marked 5532D, and the catalog number from Mouser is
513-NJM5532D, Dual Op Amp.

> U2/10, U2/11, U3/4
> U3/1, U2/2

> U3/6, U3/7 (both are part of the 12.0 MHz oscillator)
> U2/1
> U1/4 (if U2/1 was OK and this one is dead, then check the
> crystal filter)
> U1/6, U1/7 (both are part of the 22.1 MHz oscillator)
> U1/1
> banded side of D1 and D2
> antenna connector (center pin)
> The above procedure tests the receive chain "backwards". If you stop
> hearing at a particular point, check the circuit in between that
> point and the previous ("good") point.

Remaining points produced nothing, as expected.

I should note a couple of things, the significance of which I have no idea.

C27 (0.1mF cap, right before the output network) has 12.5V on it. This *looks* right, at least from the 5 watt mod schematic. The resistors around the IRF510 have 9V (nominally) on them. I'm no genius about the schematic, but this seems correct to me.

>(4) If you have a general-coverage receiver, "listen" to the 12.0 and
> the 22.1 MHz oscillators around those nominal frequencies.
> Use a short wire for the antenna of the test receiver and place it
> close to the "38 Special" board, while applying power.
> Check that the 22.1 MHz signal varies when you change the position
> of the tuning pot.

Can't find a signal at 22.1 MHz anywhere.

> Check that the 12.0 MHz moves down about 600 Hz with key down vs.
> key open.

This actually worked as described -- sounds like we can narrow down to the 22.1 MHz oscillator area -- now, where is that??

This is as far as I can get tonight. Any comments so far will be appreciated. I can proceed further if need be, but it seems until the 22.1MHz oscillator oscillates, I have found the symptom, and probably the cure. How do I make it go?

72 es 73 de=20
Marty, KM7W

Jackson, Tennessee

e-mail: mdwatt@usit.net
<http://www.public.usit.net/mdwatt>

"The Curmudgeon's Corner"

NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq

~~~~~  
From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: HIMES@idic11.idi.oclc.org  
Subject: [14940] 38S key click search  
Message-ID: <01IGLUA9L2MQAI04FQ@idic11.idi.oclc.org>

Last night I was poking a scope probe around my 38S trying to discover the source of the key-up click. The problem is particularly bad on mine. I set the Tick keyer to its fastest speed (makes scope triggering more regular) and held my keyer paddle to make dots. I observed quite a negative spike (glitch), on pin 1 of the 4066 chip, some milliseconds AFTER key-up. I cannot speculate on the actual source of the spike but that's the 'earliest' place I could find it.

The click is visible on the scope throughout the audio chain.

The tick chip appears to have clean keying and sidetone waveforms.

Marty WB8FNH Columbus Ohio

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
Subject: [14905] 40M Beacon List and Distances  
Message-ID: <199703170452.EAA10883@chuck.dallas.sgi.com>

Gang,

OK, dug out the Atlas and here are the most accurate values that I have. Anyone gets any closer, let us know.

40M Beacons heard around 7.039MHz

No data known on power levels or antenna patterns at this time.  
(K5FO: my guess would be QRP levels due to the low strength of signals even when heard)

|                                 |         |        |              |
|---------------------------------|---------|--------|--------------|
| C - Moscow, European Russia     | 37.58E  | 11.72N | (in degrees) |
| D - Odessa, Ukraine             | 30.70E  | 46.48N |              |
| F - Vladivostok, Asiatic Russia | 131.85E | 43.14N |              |

K - Khabarovsk, Asiatic Russia 135.10E 48.50N  
 L - St Petersburg, Eur. Russia 30.33E 59.92N  
 M - Magadan, Asiatic Russia 150.83E 59.63N  
 O - Moscow, European Russia 37.58E 55.75N  
 P - Kaliningrad, Eur. Russia 20.50E 54.72N  
 S - Archangel, Eur. Russia 41.00E 64.66N  
 U - Murmansk, Eur. Russia 33.08E 68.97N  
 X - Prague, Czech Republic 14.43E 50.08N  
 u - Kholmok, Asiatic Russia 142.08E 47.66N  
 \*\*\*\* u is dididahdah \*\*\*\*

Here are some distances in miles from the beacons to  
 the city indicated and number in parenthesis is beam  
 heading in degrees:

| Beacon | Seattle,WA  | San Fran.,CA | Phoenix,AZ  | Dallas,TX   |
|--------|-------------|--------------|-------------|-------------|
| C      | 8,150 (22)  | 8,774 (24)   | 8,726 (37)  | 8,131 (52)  |
| D      | 5,731 (18)  | 6,377 (18)   | 6,443 (24)  | 6,055 (33)  |
| F      | 4,711 (310) | 5,163 (313)  | 5,781 (318) | 6,353 (326) |
| K      | 4,341 (313) | 4,818 (316)  | 5,424 (321) | 5,969 (328) |
| L      | 4,846 (14)  | 5,507 (13)   | 5,636 (18)  | 5,360 (24)  |
| M      | 3,383 (318) | 3,904 (322)  | 4,484 (326) | 4,986 (330) |
| O      | 5,198 (11)  | 5,864 (11)   | 6,015 (16)  | 5,752 (23)  |
| P      | 5,039 (21)  | 5,675 (20)   | 5,723 (25)  | 5,339 (31)  |
| S      | 4,625 (7)   | 5,298 (7)    | 5,499 (11)  | 5,325 (17)  |
| U      | 4,281 (9)   | 4,952 (9)    | 5,138 (12)  | 4,959 (16)  |
| X      | 5,209 (27)  | 5,819 (26)   | 5,801 (31)  | 5,337 (37)  |
| u      | 4,135 (309) | 4,578 (312)  | 5,198 (317) | 5,788 (324) |

| Beacon | Denver,CO   | Chicago,IL  | Buffalo,NY  | Atlanta,GA  | Anchorage,AK |
|--------|-------------|-------------|-------------|-------------|--------------|
| C      | 8,141 (42)  | 7,359 (56)  | 6,936 (63)  | 7,495 (61)  | 7,376 (352)  |
| D      | 5,879 (28)  | 5,254 (38)  | 4,907 (43)  | 5,578 (39)  | 4,992 (359)  |
| F      | 5,697 (321) | 6,068 (332) | 6,191 (338) | 6,648 (334) | 3,305 (285)  |
| K      | 5,317 (323) | 5,669 (332) | 5,789 (338) | 6,250 (335) | 2,924 (288)  |
| L      | 5,095 (21)  | 4,577 (28)  | 4,287 (32)  | 4,982 (28)  | 4,064 (270)  |
| M      | 4,339 (326) | 4,677 (332) | 4,809 (335) | 5,257 (334) | 1,953 (293)  |
| O      | 5,479 (20)  | 4,969 (28)  | 4,677 (32)  | 5,371 (29)  | 4,342 (355)  |
| P      | 5,157 (29)  | 4,540 (37)  | 4,204 (40)  | 4,883 (36)  | 4,406 (6)    |
| S      | 4,988 (14)  | 4,569 (21)  | 4,328 (24)  | 5,025 (21)  | 3,718 (354)  |
| U      | 4,623 (15)  | 4,206 (20)  | 3,972 (23)  | 4,668 (20)  | 3,438 (358)  |
| X      | 5,223 (35)  | 4,536 (43)  | 4,166 (47)  | 4,824 (42)  | 4,694 (10)   |
| u      | 5,129 (319) | 5,543 (328) | 5,697 (333) | 6,115 (330) | 2,742 (282)  |

We have been getting more reports from AK than anywhere else in the USofA  
 and some people in Central Europe have reported hearing some of the beacons

all during daylight hours, which makes sense.

Hope this information is of use to the QRP community. Any errors are the result of this authors typing skills and will be corrected and posted as needed.

FYI

Chuck Adams K5FO            adams@sgi.com DXCC=11  
[http://reality.sgi.com/employees/adams\\_dallas/](http://reality.sgi.com/employees/adams_dallas/)

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: "Rick Hadley" <r.hadley@www.mebbs.com>  
Subject: [14892] And Still Another 38S Lives  
Message-ID: <3.0.1.32.19970316202607.0068a9f0@www.mebbs.com>

Well, the 38S that K0QVF & I have been collaborating on has survived the initial smoke tests just fine. RX sensitivity looks right on the mark, the keying looks fine on the screen and on the monitor receiver, about 4 watts out from the IRF510 mod, and the TiCK-1 is a real gem.

Now the problems, such as they are... When we put in the RIT mod, we actually lost frequency coverage, even with the 6.8mH choke. Right now we're getting about 10.099 to 10.115. We need to squeeze a few more khz out of the high end, so we're open to suggestions for component changes. The other problem of note is a pronounced drift upward of about 200-250 hz when transmitting, especially when the 38's cold. It does seem to more or less stabilize after 15 or 20 minutes, but I'm not convinced that it goes away entirely. Anyone else solved that particular problem?? Last, and least, is the infamous "thump". What're the latest thoughts on chasing that away?

Other than those few bugs, we're tickled to death. We're using a neat little two-piece Radio Shack case (270-0253, I think) and Ron came up with some genuene Rockwell-Collins knobs to match the tuning knob I'd acquired years ago, so if Bill can have a Drake 38S, I guess this one will be the Collins 38S, hi. Once we get the details cleaned up, I'll be looking for the rest of ya on the air.

73/72 de Rick, W0FG  
ARRL Life Member  
QRP-L #1019  
[r.hadley@www.mebbs.com](mailto:r.hadley@www.mebbs.com)



From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>  
Subject: [14929] Antenna Notes  
Message-ID: <Pine.SOL.3.94.970317074816.17298A-100000@utkux4.utcc.utk.edu>

Since some interest has been shown in some of the notes I have placed at my site, I thought a list of what is there might be useful and save space, relative to the alternative of printing the text of everything here.

#### Antenna Modeling Programs

The Wouff-Hong and The Rettysnitch: Lost Traditions?

10-10 and Lindbergh

Q-signals in 1930

Self-Contained Vertically Polarized Wire Antennas

Some Notes on Lower-HF Wire Beams

Moxon Rectangles for 40-10 Meters

EDZ Beam Update

Vertically Radiating Horizontal Antennas

The RST Standard of Reporting

The Half-Square on 2 Meters

Some Notes on Stacked Beams

Some Notes on Antenna Bandwidth

Some Notes on Modeling the Tee Match

Some Notes on the Ground

Antenna Articles: a personal bibliography

An-Ten-Ten-nas: a series of articles for 10-10 on antenna basics

-73-

LB, W4RNL

|                                                                                                                    |    |    |   |   |      |        |                      |
|--------------------------------------------------------------------------------------------------------------------|----|----|---|---|------|--------|----------------------|
| L. B. Cebik, W4RNL                                                                                                 | /\ | /\ | * | / | /    | /      | (Off) (423) 974-7215 |
| 1434 High Mesa Drive                                                                                               | /  | \  | \ | \ | ---- | /\---  | (Hm) (423) 938-6335  |
| Knoxville, Tennessee                                                                                               | /\ | \  | \ | \ | /    | /    / | (FAX) (423) 974-3509 |
| 37938-4443 USA                                                                                                     | /  | \  | \ | \ | \    |        | cebik@utk.edu        |
| URL: <a href="http://funnelweb.utcc.utk.edu/~cebik/radio.html">http://funnelweb.utcc.utk.edu/~cebik/radio.html</a> |    |    |   |   |      |        |                      |

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: nskouen@scientechn.com (Niel Skousen)  
Subject: [14916] Antenna pieces  
Message-ID: <v01510100af5232a0f296@[205.180.127.126]>

I also have come across 10 HF deployable antenna kit's. These are a commercial version of lightweight tactical HF antenna used primarily for NVIS (near-vertical) propagation. Each kit is for a two element endfire antenna, and consists of two antenna feed baluns, a power splitter, and the manual (user provides wire of choice..) original gov't price was in \$1000 range, original commercial \$190, and if there is interest I think that I can get them in the \$100 range. If people are interested in playing with the antenna's I think I can get the lot and people either take a complete kit or split a kit. Additional technical information is available if interested.....

ELPA 3/65

|               |                                  |    |    |
|---------------|----------------------------------|----|----|
| Freq (Mhz):   | 3                                | 15 | 50 |
| Gain (20deg): | -17                              | -6 | 0  |
| Gain (vert.): | -17                              | -9 | -- |
| feed unit :   | 9:1 (50 in 450 out), .15 dB loss |    |    |
| Input:        | 10' RG-58C/U terminated in BNC   |    |    |
| Output:       | Red / Blk 5 way binding posts    |    |    |

TNX Niel

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
Subject: [14883] Antenna Report  
Message-ID: <199703170046.AAA10557@chuck.dallas.sgi.com>

Gang,

Remember that I had difficulty in getting any QSOs lately after all the rain that we had in Feb.

Well, Saturday I pull loose the end and let the antenna down and check the center connection. What I have is a ceramic egg holding the two wires and the 300 ohm window line all together and wrapped tightly with electrical tape. Big mistake.

Took tape off and found a family of spiders (imported from California I'm sure) living comfortable in a nice two room home. Evicted them and cleaned house with sand paper and flux remover to clean it up nicely. Then proceeded

with the hot glue gun to fill all rooms to capacity. :-)

Antenna went back up.

First call outta the box on 30M with 0.95W was answered. Second call was answered.

Today third call was answered so antenna is back. The aerial is everything in this QRP game.

Oh, the family is doing well in trees. Not to worry about them. They scared me to death when the big one jumped out and slid down the fire escape.

dit dit

So it does help to monitor tuning point and clean up the connections etc. almost yearly. Mother nature is a bear.

Chuck Adams K5FO          adams@sgi.com DXCC=11  
[http://reality.sgi.com/employees/adams\\_dallas/](http://reality.sgi.com/employees/adams_dallas/)

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Bill Myers <bjmyers@arc.net>  
Subject: [14891] Audio Filters and DSP's  
Message-ID: <1.5.4.16.19970316201830.1c376a6c@mail.arc.net>

Okay Audio Gurus....

I was using an M&M Electronics MSB-1 Audio Filter when I got my Radio Shack DSP-40. The DSP-40 was a definite improvement, however, I did notice that the audio seemed to be much lower when in the sharpest mode.

Yesterday I bought an old Heathkit HD-1418 Active Audio Filter. Put it on the rig last night and tuned around the bands. Looked for CW signals that were in the garbage with no filtering at all. Kicked in the DSP and it didn't "raise" the signal (or make it louder) but did kill some of the noise. Kicked the DSP out and the Heathkit in. BIG DIFFERENCE with some minor adjusting on the Heathkit. Garbage gone and the signal seemed MUCH LOUDER. In fact I had to turn the audio down some when the tuned signal got "in the bandpass" area, it actually got so loud it started "ringing".

Putting the MSB-1 in line and making the same adjustments as with the Heathkit and it didn't sound anywhere as good as the Heathkit.

Needless to say, I'll be running the Heathkit for a while.

Can anyone explain WHY??????

Rig is Icom 735 at 4 watts, 40 meter dipole up 25', MFJ antenna tuner.  
Nothing extravagant...

72/73's

--

Bill Myers      KK4KF      Grid - EM60rk  
FISTS#2390 QRP-L#755 ARCI#9282 scQRPions#42  
CQC#386 NE#508 AK/QRP#081  
Snail Mail      P. O. Box 178    Shalimar, FL 32579  
e-mail          <bjmyers@arc.net>  
homepage <http://destin.nfds.net/~bmyers/>  
CHECK OUT THE FISTS INTERNATIONAL CW CLUB U. S. HOMEPAGE  
<http://n9nvv.qrp.com/~fists>    (That's N 9 N V V)

From owner-qrp-l@Lehigh.EDU    Mon Mar 17 18:04:47 1997  
From: "Bradley S. Mitchell" <bmitchel@kodak.com>  
Subject: [14928] backpacking antennas  
Message-ID: <332E07F1.687B@kodak.com>

Well, I sent out that note on backpacking antennas, and  
then got so busy at work/home, I haven't even had a minute  
to read them yet! I have archived the responses to my personal  
account, for reference. Thanks to all that responded, and  
I'll review these notes for field day..

73 Brad WB8YGG

From owner-qrp-l@Lehigh.EDU    Mon Mar 17 18:04:47 1997  
From: tmh@world.std.com  
Subject: [14952] Backpacking: "self-contained" antennas  
Message-ID: <Pine.SGI.3.95.970317111810.14875A-100000@world.std.com>

For backpacking I'm interested in antennas that are self-contained. By  
this I mean

- no radials
- no supports needed (trees, YLs)
- zero or asymptotically close to zero setup time

We hike in the White Mountains of New Hampshire. Above 4,000 you're in

alpine-tundra. No trees, just rocks and lichens. Monster storms come in from Canada on very short notice (the highest wind speed ever recorded was on Mt. Washington, 231mph if I remember correctly), sending everyone scurrying. Once we've reached a summit we typically eat lunch and spend a few hours. It's here I'd like to operate during the day on 20m. Other hikers will come by and I'll get to sell ham radio, etc. For these conditions antennas that meet the above requirements are pretty much mandatory. Radials are trip-hazards and might scare people away. There are no trees for dipoles. You have to be able to pack up and leave quickly.

Can people suggest antennas that meet the above requirements? I have already built a Distributed Capacitance Twisted Loop (DCTL) out of 300-ohm twin lead (it's only a couple of feet on a side, and can hang from a walking stick). I'll try this little gizmo out this season. Don't know how it will be for QRP.

I'm currently experimenting with two pieces of PVC tubing 1/2" diameter that go together, with a Radio Shack metal whip on the top. The total length is about 11' and it takes 10 seconds to set up (I'll leave it strapped to my backpack, sitting on the ground, for support). I would like to try \*linearly loading\* 1/2wl onto this (just to experiment with linear loading). If it doesn't work I'll wind it on inductively. I'll also have a 1/2wl counterpoise wrapped on the bottom. Is this 1/2wl vertical with counter-poise a theoretically valid antenna? Can I feed this arrangement with coax?

-- Tim N1PAZ

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: "Len W. Tough" <len@infinet.com>  
Subject: [14913] Builders Report - GM-15 RETRY  
Message-ID: <199703170517.AAA07870@mail1.infinet.com>

Lets try this one directly if you are interested - direct from the web site

Small Wonder Labs Green Mountain GM-15 Transceiver

I found myself wishing I had a homebrew QRP rig for one of my favorite CW bands, 15 meters. I was contemplating a few companies when I happened upon the web site of Small Wonder Labs. After reading a few mini reviews

of the rig, and checking out the web site, I placed my order with Dave Benson, owner of Small Wonder Labs.

The rig arrived shortly thereafter. I had promised myself that this kit would not be rushed to get it on the air, as many of my other kits had been. Sure, I always did the usual careful assembly and alignment job, but I was usually anxious to get the rig on the air. The build was only a way to get there. Well, with this kit, it would be different. I planned on savoring the build, and making the assembly of the main board a work of art. I found upon examining the parts and board quality, that I had not made a mistake in ordering this fine kit.

The board is of high quality, and plated through. The silkscreening is good. There is very good use of board space, with most resistors, diodes, and the few molded chokes mounted vertically to conserve space. Dave has really put space accommodation to good use. The parts of all of good quality, and the assembly manual is more than adequate for the intermediate or advanced kitbuilder. The beginner builder may want to read through the manual a few extra times, and pay close attention to the helpful notes that Dave has put in to try and eliminate pitfalls. There were a few very minor discrepancies that may confuse novice kitbuilders, but one only has to remember that help is only an email or a phone call away. Dave is excellent about getting back to you.

The circuit description of this rig is exciting for those that want good value for their money. How does a heterodyne local oscillator sound for starters? As Dave notes, the extra complexity isn't really necessary for low-band design, but it really facilitates operation on the high bands. Small Wonder Labs also makes use of a Colpitts oscillator running at approximately 4.9 Mhz mixing with a crystal-controlled oscillator running at 8.192 Mhz. The mixer output is then bandpass-filtered to give the desired 13 Mhz injection frequency. There is ample front end and bandpass filtering, as well as a good IF filter circuit. Filter Bandwidth is approximately 900 Hz. There is a valuable audio output stage that uses an LM380. I find this a very nice feature. You could easily drive a modest speaker with the output of this circuit. Other goodies include an RIT circuit, good QSK, nice sidetone, board variable RF power output from about 1/2 watt to about 2 watts max. output, and pre-molded wiring harnesses. All in all, a tidy package for about \$75 dollars.

The kitbuilder is urged to start with the heterodyne section first, and to then test that section. That is exactly what I did. This stage is set-up on the extreme right of the board, and there is a separate pictorial board drawing for just the HET. section to allow you to easily complete it before moving on to the rest of the project. Once the HET. section is complete, an oscilloscope really comes in handy. You simply use your probe to check waveform off of the 220 ohm resistor at the top of the board, and then tweak c30 and c34 for maximum amplitude (approximately 0.8 p-p). If you don't have a scope, Dave Benson has included a Heterodyne LO test circuit package for you to wire and then use your VOM to perform the HET. section alignment. Either way, you are in business. Once you have accomplished this alignment, it is on to the

rest of the project.

As I took inventory, I noticed that a series of MONO CAPS were missing. No problem, One quick email to Dave at Small Wonder Labs and the caps were in the mail immediately. I had them in Two Days. I was impressed. In the mean time, I assembled the remaining board, wound the 11 toroids, and the 1 bifilar transformer. When the missing caps arrived, I installed them, and moved on to final alignment.

Frequency adjustment is also very straight forward. If you have access to a frequency counter, simply connect the counter to the same 220 ohm resistor, and set the heterodyne L0 frequency for about 13000 Mhz - depending on where you want your transceiver frequency coverage to start. Adjustment is done via a C19 trimmer cap. This cap provides limited frequency adjustment, and you may have to "PAD" the L3 toroid pads with a capacitor. Dave provides two that should do the trick if you need them. In my case, the capacitance of neither was enough. I had to use a 150 pf cap, and this did the trick nicely. I was then able to tune right to 13.000 Mhz. This would put me at a 21.000 Mhz starting point on the rig. Again, if you do not have access to a frequency counter, Dave has help for you. The instructions outline a way to adjust frequency via a general coverage receiver, or a ham band rig.

Receiver alignment is next. The builder adjusts T1 (IF transformer) for maximum hiss in the speaker/headphones. Then you connect a 50 ohm antenna, and adjust c3, c5 and c49 for maximum atmospheric noise. Almost done aligning now. The transmitter is aligned as follows. A 50 ohm dummy load is connected to the ant. out jack, and you set the R1 trimmer fully COUNTERCLOCKWISE (low or no RF power output). Again, if you are lucky enough to have a scope, you connect the scope probe to the collector of Q5. Then tweek C40 and C45 trimmers for maximum signal on your scope. If you do not have the scope, Again Dave has provided instructions for tune-up into a ham band transceiver.

All You have to do now is adjust R1 (the drive pot) to the level of RF output that you want. You will find that the maximum is about 2 watts. I had forgotten to switch from the Fritzel Windom that I had used for atmospheric noise, back to a dummy load at this stage, and since the Windom does not play 15 meters, SWR was very high. This caused frequency take-off and wave drifting of the rig above 1 or so watts. Once the antenna was brought into resonance through tuning, the rig behaved well at ALL power levels, as expected.

For my project I chose a Crown Royal case (available from Mouser) and a TICK keyer from Embedded Research. The rig draws about 35 mA while idling, so it is a fairly battery friendly rig. The pre-made wiring harnesses and header pins made final wiring a snap. I also opted for a 10 turn pot for tuning (also available from Mouser) and a turns counter to help me keep track of where the tuning is. I have a tuning range of approximately 75 Kc, from 21.000 to about 21.075. Absolutely perfect for me.

Upon putting the rig on the air for the first time, I must say I was impressed. The selectivity was good, the audio sounded great, and the

"feel" of the rig was comfortable. I tuned around a bit and heard a W7 station signing 73. I centered the frequency, and gave him a call when he finished. He came right back to me and gave me a 549 with good tone, no chirp, and no drift reported. What more can you ask for?

If your adventure in QRP is taking you to the higher HF bands in search of sunspots, or if you want a good value board kit for just about any HF band, consider the Green Mountain series from Small Wonder Labs. I am glad I did!

Posted 3/97 KG8SF

Best 72/3

Len

KG8SF

len@infinet.com

KG8SF@key.com

---

|             |          |             |              |
|-------------|----------|-------------|--------------|
| QRP-L # 841 | CQrp # 2 | ARCI # 9025 | FISTS # 2134 |
|-------------|----------|-------------|--------------|

HF Digital Communications - CW/Pactor/G-Tor/RTTY/Amtor

CHARTER MEMBER - THE COLUMBUS QRP CLUB - \*CQrp\*

Web Page: <http://www.infinet.com/~len>

QRP Homebrew Rigs = OHR 400, S&S TAC-1, NORCAL 38S, SWL GM-15,

Kanga Any Band Xmitter, Bare Essential 50c5 Xmitter

---

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997

From: "Len W. Tough" <len@infinet.com>

Subject: [14906] Builders Report: Small Wonder Labs GM-15

Message-ID: <199703170453.XAA05008@mail1.infinet.com>

--Emler\_-1349769147

Content-Type: text/plain; charset="US-ASCII"

Hello gang.

Well, I am duely impressed. The Small Wonder Labs rig for 15 meters is complete. I enjoyed this kit. It is a FB rig. I have posted the builders report to the CQrp web site at:  
<http://www.infinet.com/~len>

For those with no web browser, if interested, I am attaching a text file FYI. Hopefully the internet and my MAC are kind to the content and you



can decypher.

Best 72/3

Len

KG8SF

len@infinet.com

KG8SF@key.com

-----  
QRP-L # 841            CQrp # 2            ARCI # 9025            FISTS # 2134

HF Digital Communications - CW/Pactor/G-Tor/RTTY/Amtor

CHARTER MEMBER - THE COLUMBUS QRP CLUB - \*CQrp\*

Web Page: <http://www.infinet.com/~len>

QRP Homebrew Rigs = OHR 400, S&S TAC-1, NORCAL 38S, SWL GM-15,  
Kanga Any Band Xmitter, Bare Essential 50c5 Xmitter

-----  
--Emler\_-1349769147

Content-Type: application/mac-binhex40; name="Clipboard.SIT"

(This file must be converted with BinHex 4.0)

:\$80XDA"LEf&bC#j6593!8dP84&0\*9#%!!!!!!)B!!!!@9Y6593K!!%!!!# 'FNa  
KG3\*Y!!!!&Q&M!!!\*3faTF'\*[BA\*Nkr`"@82-!9Qpa!&C[F3"D""6G(9QCZd)!!!  
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!\$rrrrr3da\*8%e"3e-4!+a2Jam!!@&!!!!  
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!'4\$X\*!!!!:

--Emler\_-1349769147--

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997

From: Glen Reid <k5hgb@flash.net>

Subject: [14888] Central Texas QRP Club Formation \_ 2nd and Final (Probably)  
Notice

Message-ID: <332CA741.1268@flash.net>

Anybody else want on the list?

On 2/13 I posted this message:

Anyone interested in a QRP Club forming in  
Central Texas, please send me an email with name,  
call, and address for more information.

Also looking for good suggestions on

possible meeting places south of Dallas,north of San Antonio, west of Houston and east of where ever. Well, that area maybe a bit expansive, but you get the idea.

This will be a club for fun and fellowship only.

No dues, no officers, no bylaws. Just some good conversation and QRP interest.

--

GLEN REID K5HGB                      Austin, Texas

...in the beautiful hill country of TEXAS...

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Scott Bauer <ke3nv@erols.com>  
Subject: [14902] Code Practice on 7.058 Is it live or Memorex??  
Message-ID: <199703170410.XAA18042@smtp2.erols.com>

>Date: Sun, 16 Mar 1997 23:09:43  
>To: GQRP-L  
>From: Scott Bauer <ke3nv@erols.com>  
>Subject: Code Practice on 7.058 Is it live or Memorex??  
>  
> I wonder if any one knows if the K7HLR code practice  
> on 7.058 is done live or  
>programed. I just listened in and noticed a few strange  
>CW characters. They were .-...- and .---. Are these  
>some used by the real old timers or sending mistakes. They  
>were sent through out the code session.

>  
> Just curious, 72 Scott  
>

72&73 de Scott Bauer W3CV, Odenton, MD. grid FM19. Formerly KE3NV  
Fists 1502                      QRP Nut   SWL   Truck Pilot                      ARRL  
Current QRP rigs: Green MTN 15 & 17, HW-8, G-QRP GQ-40  
S&S Eng ARK-20, ARK-30, ARK-40, TAC1-80, all Sensational rigs.  
38 special at 300mw

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: PDouglas12@aol.com  
Subject: [14944] Dayton: Badges Announcement  
Message-ID: <970317110913\_-1371568744@emout05.mail.aol.com>

Hi Gang,

In accordance with Chuck's pronouncement that we will keep Dayton traffic on the main QRP-L distribution, this message is for Dayton '97 attendees:

I would like to open the gate for Dayton badges this year on the 4th of April. That leaves us 5 weeks to get everyone to email me their requests.

For those who haven't seen this before, I do convention-style ID badges for the Hamvention with a little QRP-L logo, Name and Call. This year I will try to do a single badge on which I will add Vendor Company names and/or FDIM when appropriate.

I do these badges as a service for my friends, and they are free. If you are signed up for FDIM or you are a Vendor who has RSVP'd me that you are coming to the FDIM Vendor night, you need do nothing. Your badge will be listed automatically and can be picked up at FDIM functions. If you are not coming to FDIM but expect to be at Dayton, you will have to email me at pdouglas12@aol.com AFTER APRIL 4 PLEASE. I will publish a badge list with the info about weekly until just before Dayton. They can be picked up at FDIM functions or at the QRP booth in the Hamvention hall. I will not mail them. They are for Dayton attendees only. And I can't do badges for your friends who aren't online. Sorry, but I do about 150++ badges as it is, and I have to draw the line somewhere. However, I will of course be delighted to do badges for spouses and offspring.

That's it. The countdown begins. You coming?

72,

Preston WJ2V

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Joe Gervais <vole@primenet.com>  
Subject: [14947] Early FYBO Results...  
Message-ID: <199703171654.JAA25330@usr05.primenet.com>

Howdy Folks,

Only 5 days left to get your FYBO logs in! Figured it was a good time to summarize the stats so far.

Over 1800 QSOs (not QSO points - actual QSOs) have been reported so far. That's a whole lotta RF. :-)  
Great job everyone!

Three stations broke the 100 QSO mark, and at the moment a milliwatt entry from the field is in the lead for single op points, closely followed by a "full gallon" QRPer. The multi-op race is close too.

Nobody worked more than one N/T+ station :-( so there will be a drawing to determine the winner.

And at the moment, everyone who turned in a log has better than 1-in-100 odds at winning the TenTec QRP xcvr. Cheaper than the lottery and better odds to boot. :-)

Full results will be posted Sunday night. Strange lights were reported over Phoenix last night - a good omen for QTTF. And now we don't even have to leave town to operate from an "unusual alien site". :-)

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

2-Way QRP WAS: 46 (Need: HI, ND, RI, WV)

"It was the monkeys! The monkeys did it!"

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Stew Whitehouse <STEW\_W@CompuServe.COM>  
Subject: [14885] Expedition  
Message-ID: <199703162028\_MC2-12B0-9CEC@compuserve.com>

The following is from the Ohio/Penn DX News Letter (OPDX):

MAJOR QRP IOTA DXPEDITION (Rare County)! The Knightlites, a QRP club consisting of Andrew/K4HQ, Dave/WA4NID, Paul/AA4XX, Steve/AA1BK, Tim/N4EKP, John/WB4OFT, and Bob/AE4IC, will be going to Porstmouth Island (NA-067, NC-0??) on April 4-6th. Portsmouth is an UNINHIBITED island located on a North Carolina map due south of Ocracoke Island and is in Carteret County (the RAREST county is NC!!!) They WILL be running QRP with 4 stations on

the air simultaneously! Three stations will be on CW and ONLY one SSB  
Their antenna will have a triband yagi at approx. 60-80 feet for 10, 15,  
and 20 meters. For the lower bands, they will have a Carolina Windham and  
a G5RV, and maybe a 4 square on 40 and 80 meters. Frequencies will be on  
the common IOTA frequencies, as well as the County Hunter's frequencies  
and in the DX window, if they need to. QSLs via K4HQ, Andrew Lewis,  
7612 Justin Place, Chapel Hill, NC 27514-9708. A special webpage was  
just setup for the expedition. It has all the info and will be quite  
helpful in the coming weeks. After the expedition, they will have ALL the  
LOGS available for checking! The webpage URL is:

<http://www.ipass.net/~aa4xx/ocra1.htm>

Hmmm, very interesting.

72/73 Stew KE4YH

Dunedin, Florida

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997

From: ed.welch@cheaha.com (ED WELCH)

Subject: [14925] Expedition

Message-ID: <8D4157B.00040016F6.uuout@cheaha.com>

-> NC-0??) on April 4-6th. Portsmouth is an UNINHIBITED island located

^^^^^^^^^^

-> on a North Carolina map due south of Ocracoke Island and is in

-> Carteret County

WOW!!! And your wives are letting ya'll go????!!!!!! ;-)

72/73

Ed Welch KF4KRV

NorCal Member #???

1st Grand Poobah ScQRPion of Alabama

QRP-L #873 - FISTS #2964

Luverne, Alabama

Crenshaw County - Grid EM61

```
+-----+
-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----
+-----+
```

> Isn't "time" a 4-letter word? <

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997

From: "Jim Kornacki, KS4DU" <jkorn@palmetto.net>

Subject: [14957] Field Day  
Message-ID: <332DE102.2812@palmetto.net>

For those of you who are planning an Appalachian mountain field day effort this year (GA, TN, SC, NC); I'd like to go along. I'd prefer to just camp, not hike. If you could use an extra set of paddles let me know.

72, Jim KS4DU in Jackson, SC

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: camqrp@cyberg8t.com (Cam Hartford)  
Subject: [14903] Final Fox  
Message-ID: <199703170437.UAA15897@key.cyberg8t.com>

Gang -

Making Final fox preparations here.

Got the Rhombic up, pointed North-South, so as to maximize coverage of the Golden (Fox) State.

Got the Texas Filter tuned.

Got the XYL on a flight for a secret mission to Tucson.

Got the UTC clock set - 0200 - 0400 March 20

6:00 PM to 8:00 PM Left Coast time, Wednesday evening, March 19.

2/73,

Cam N6GA

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: ukii@megsinet.net (ukii)  
Subject: [14936] For your ease: Web Page help.  
Message-ID: <19970317145159063.AAA109@ns1.megsinet.net>

Hello Gang.  
Well, while waiting for a 74hc240 chip to get my 38s working I figured I would tell you about a tiny program I found.

It is called HTMLdrv.exe from the PowerToys guys over at Microsoft.  
What it does is allow you to print a text file as a HTML file.  
What does this mean? Well,those many excellent messages I have been reading  
about  
construction,testing etc can be printed up and easily stuck on your (the  
authors) web site.  
It really works,even I made it work,so it must be foolproof...  
Anyway,thought it might help all you website guys out there by saving time  
retyping all that stuff...  
Anywho,73  
de john  
n9ukx  
\(if you cant find the 94k program,I can e-mail it to ya...((sorry,not to  
JUNO.COM))

```
> if it doesnt have a sidetone <
-- or its not homebrew --
-- it must be a CB --
```

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Brad Mugleston <bmug@gwl.com>  
Subject: [14955] FOX Hunt and 38 Special fixes  
Message-ID: <01BC32C0.22577D80@pps-pc10.gwl.com>

Don't for get the N/T+ Fox Hunt tonight - it should be a double header - I  
know I will be there from 0200 to 0400Z on or about 7.112. I'm behind on  
my digests can anyone tell me if Tim is going to be on and where?

Also I can't stand it. I wrote last night about my 38 Special and the  
Rockies game but that was from home and now I'm at work and I want to know  
what I did wrong. If its not too much bother can you CC to me here at work  
-- bmug@gwl.com --- Thanks.

See you all tonight

de KBØROL, Brad

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: kb0rol@juno.com (Bradley L Mugleston)  
Subject: [14965] FOX HUNT TONIGHT  
Message-ID: <19970317.165913.7823.0.kb0rol@juno.com>

Dont for get the FOX hunt tonight - I will be on 7.112MHz from 0200 to 0400Z (thats just over 2 hours from now

See ya there

Brad Mugleston - KB0ROL  
Colorado QRP Club # 170, QRP-L #316, ARRL  
QTH - Aurora, CO - DM79oq  
KB0ROL@JUNO.COM  
BMUG@GWL.COM

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: "Vernon A. Hatley" <vhatley@flash.net>  
Subject: [14948] FS (still): Kenwood TS-140  
Message-ID: <199703171700.LAA12630@endeavor>

It's still for sale. Mint Kenwood TS-140s. Mic, manual, power cord, factory box, \$500. Goes down to milliwatt levels from from panel. Or to 100 watts max.

--

KK5RO  
Vernon A. Hatley  
Shawnee, OK

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: "Brian K. Short KE7GH" <ke7gh@primenet.com>  
Subject: [14887] FS: Index Labs QRP+  
Message-ID: <3.0.32.19970317015510.007339b8@mailhost.primenet.com>

Decided to sell the QRP+ and devote myself entirely to homebrew (for QRP work). I already offered it to the AZ QRP Network, but they already have two each. You know the story: Been there, done that, got the T-shirt, surfed the web site,..



Here's the deal: Index Labs 5w CW/SSB QRP+ \$500 obo shipped  
(COD cash/money order only or payment in advance)

Decided to persue building an "original" NorCal Sierra.

Rig is barely used, mint condition, box/manual/cable.  
Email direct or telephone anytime.

Brian Short 1994 E Laguna Dr Tempe, Az 85282 (602)839-3484 ke7gh@qsl.net

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: kub@pacificorp.com (Steve Kubisch)  
Subject: [14938] FS: Original Norcal Sierra  
Message-ID: <9703171520.AA00269@ringworld.pacificorp.com>

Hi,

Having just completed a Wilderness Radio Sierra, my Norcal  
Sierra is not getting much use. It's just too good a radio to be  
setting idle.

For Sale: Original Norcal Sierra

1 band module of your choice (nothing worse than a new  
radio that you can't use) 80,40,30,20,15 available. Others  
available from Wilderness Radio.

Built in Oak Hills Research Curtis keyer with front panel  
speed control.

\$225

This radio is in excellent condx and works great. Hot reciever and  
about 2-3 W out depending on band. Built by professional Electronic  
Tech. (me)

I'll pay shipping to U.S.  
Payment COD/UPS or prepayment.

73,  
Steve -WW7Y-  
kub@pacificorp.com

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Steve Hideg <Steve.Hideg.1@nd.edu>

Subject: [14941] FS: UNBUILT Original NorCal Sierra  
Message-ID: <v03020902af5312c811e5@[129.74.251.198]>

I have an unbuilt original NorCal Sierra kit for sale.

Includes band module kits for 80, 40, 20, & 15m, as well as one blank band module.

This kit is unbuilt. It hasn't even been started.

\$200 or best offer.

--Steve

---

Steve Hideg, N8HSC/9 QRP-L #136  
Check out the Internet QRP Club's site on the WorldWide Web:  
<<http://qrp.cc.nd.edu/QRP-L/>>

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: "David Kreinberg" <kreinbd@ccgate.dl.nec.com>  
Subject: [14946] GOOD DX DAY/NC38S DOING WELL  
Message-ID: <9702178586.AA858624142@smtpgw.ccgate.dl.nec.com>

Greetings Folks:

Well, I put some new parts on the 38S on Friday. Put a 4.7uH choke back at L1 (had a 6.8uH there) and replaced the RS pots with some better offerings from Mouser. Get really nice tuning from 10.102 to 10.121 now. No "dead" spots with the new pots. Worked TN and CA who both said the rig sounded good. I was worried that my "new improvements" were a mistake when I noticed the trash around 10.113-10.114. I thought I caused this trouble. Checked it out on the FT-840, so knew it was either local QRM, or some junk. Saw today that it's FM? Interesting and sure is causing grief around that frequency. Hope it goes bye-bye soon!

Worked LZ1LZ (Sofia, Bulgaria), an EA2 and a FY5 about 1600z on 20m with 3w. Also a PY on 15m at 1530z with 5w. I know the SF and spot numbers are still low, but these were fairly easy and they gave me good reports.

20m seemed very good (3/16) and was hard to find a place to shoe-horn in a spot between ongoing QSO's.

73 de Dave NR3E/5  
nr Dallas, TX  
qrp-1 #25, ARRL

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: "Paul F. Young" <pfy@axe.intercall.com>  
Subject: [14889] Help w/NC40A Mod  
Message-ID: <3.0.32.19970316090719.00803a00@mail.intercall.com>

Hi guys,

I need some help from the more electronically inclined members of our group to implement a power modification to the Norcal 40a radio I have. The power mod I'm referring to is written up in the March '95 QRPP on page 6 as a 5watt low heat mod by Dave Meacham W6EMD (if you read this Dave please help). I have all of the parts ready but I don't have A binocular-core transformer of a 3:5 ratio. What is a binocular-core transformer? Can it be purchased or is it made from a torroid core and what size do I need(size wire and turns)? He also mentions the article in the June '94 QRPP by KN6VO pg44-45, which of course I don't have so if some one could e-mail me a name and address I would be happy to reimburse any cost to send me a copy of that article.

TNX 72/73

"Never let ignorance stand in the way Learning"

Quote: probably somebody famous it's too deep for Me

<fontfamily><param>Lucida Handwriting</param><bigger><bigger>Paul  
F.Young, KC2AHB

pfy@intercall.com

Ramapo Mt. A.R.C, S.A.R.A. (N.J.)

AKQRP #042 QRP-L #881 ARCI #9308</bigger></bigger></fontfamily>

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Bill Myers <bjmyers@arc.net>  
Subject: [14890] HM-9 Help and HamFest Goodies  
Message-ID: <1.5.4.16.19970316201826.1c3760fa@mail.arc.net>

First off, THANKS TO ALL who answered my question on the HM-9 QRP Power/SWR Meter. Whomever replaced the right hand selector switch did it with an 8 position switch. I'll get a three position one in before too much longer.

A couple of you have offered to copy the manual, THANKS. I asked one of you to copy it for me and let me know what it costs. If that falls through, I'll send a personal e-mail to another one asking the same.

It was a productive weekend. It should be noted that I had \$203.00 in my pocket for the weekend, and I assured my wife that it would probably all be gone by Sunday afternoon. Went and helped folks and vendors unload Friday night. That's when I got the HM-9 for \$20.00. The case is all scratched up, but I like projects and it'll be fun to clean up.

Saturday I got there early. Found lots of goodies I wanted, but I was looking for specific things, mostly test equipment for the project building. Found a Heathkit Solid-State Dip Meter (HD-1250) with all coils and a manual. While looking at it with a friend, the friend stated that the owner probably wanted \$50.00 for it. The person helping at the table yelled over to the owner and asked how much he wanted. He yelled back \$20.00 and I got to my money first. My buddy reminded me for the rest of the weekend how I "knocked him out of the way" to get it. He failed to tell everyone that I was standing between him and the table, and my money was in my "quick draw" pocket. The day was looking better...

By the end of the day I had bought a B&K Model E2000 Signal Generator (\$15), a MFJ-207 Antenna Analyzer (\$60), a Heathkit HD-1418 Active Audio Filter (\$40), a roll around cart for my antique Heathkit 5" Lab Scope (\$25), a new name tag and hat (\$16), and other small stuff. By lunch time, when I came home to eat, I had spent \$206 and still had \$20 something in my pocket. My wife looked at me kinda funny, I forgot to tell her I sold my D-104 (\$20) and Turner +2 (\$5).

Went back Sunday morning and took a 4 811A's. Sold them right off for \$10 apiece. Also took my Drake Twins (C-Line) on Saturday, but no one wanted to

buy them, and mine were the cheapest ones in the building, there were 4 other sets of Drake Twins for sale. Anyway, found an MFJ Frequency Standard unit and bought it (\$15) and a recharger unit for nicads that will be easy to convert for gel cells (\$10). Didn't win any prizes and helped cleanup before going home. Got home by 3:30.

Got home and still had money in my pocket, musta did something wrong...

Oh well, lots of fun and got some good gear too.

Saw a OHR-100 (40 meter) for \$99. Didn't get it, not that high on my list, but know the owner (he's a local) so I might get it later.

Enough for now

72/73's

--

Bill Myers      KK4KF      Grid - EM60rk  
FISTS#2390 QRP-L#755 ARCI#9282 scQRPions#42  
CQC#386 NE#508 AK/QRP#081  
Snail Mail      P. O. Box 178   Shalimar, FL 32579  
e-mail           <bjmyers@arc.net>  
homepage <http://destin.nfds.net/~bmyers/>  
CHECK OUT THE FISTS INTERNATIONAL CW CLUB U. S. HOMEPAGE  
<http://n9nvv.qrp.com/~fists>   (That's N 9 N V V)

From owner-qrp-l@Lehigh.EDU   Mon Mar 17 18:04:47 1997  
From: Joel Malman <malman@BBN.COM>  
Subject: [14898] Knight-Lites tonight (Sun)  
Message-ID: <199703170331.WAA35516@nss2.CC.Lehigh.EDU>

QRP Folks,

Went looking for the Knightlites tonight on 3710. Even called CQ looking for you folks. Nothing heard. Maybe the all the KL's skipped over the Ma QTH! Sri I missed you all, maybe next week.

OB-QRP: worked 41 QRP casual contacts in the VA QSO party on 160, 80 and 40 meters this weekend. Never signed "/qrp" once, and was usually answered on the first call.

Let me work QRP anyday .... Just love it.

/joel    wa1qvm   (condo-bound in concord, ma.)

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: ckrelic@bellatlantic.net  
Subject: [14896] Mercury Question  
Message-ID: <332CB938.54C7@bellatlantic.net>

Does anyone know where I can "View" the Mercury Paddles?

Thanks, Curt/Ka3ivb

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Jim W7LS <w7ls@brigadoon.com>  
Subject: [14923] MFJ204B antenna analyzer 4 sale/swap  
Message-ID: <199703170903.BAA00988@olympic.brigadoon.com>

Hi, gang. I have a MFJ 204B antenna analyzer for sale or swap for some qrp goodie. It has a built-in oscillator for hf, a resistance knob, and a meter. You use it to find out antenna impedance. Tune for freq of interest and null the resistance knob. Reads out impedance from a chart. Just don't need it, now. I have a noise bridge and a dip meter. (Does this mean I'm a dip????)

I see them for around \$70 at fleamarkets. Seems fair. Or tempt me with some qrp goodie. Maybe a part trade of a 38 special (prefer a built up one, but not essential). Maybe one of the qrp tuners. Whatever. Lemme know what you have.

.73 (73 down 20dB) de Jim, W7LS

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Buck Switzer <n8cqa@tir.com>  
Subject: [14884] MI-QRP Club Officers  
Message-ID: <199703170124.UAA01374@tir.com>

Gang - At the Marshall, MI swap on Saturday (03-15-97), election results were tallied and the '97/'98 MI-QRP Club officers are:

|            |                     |
|------------|---------------------|
| Pres.      | Tim Pepper, K8NWD   |
| Vice Pres: | Hank Kohl, K8DD     |
| Sect:      | Buck Switzer, N8CQA |
| Treas:     | Stan Arnett, AC8W   |
| Directors: | Jerry Totten, K8JRO |
|            | Ralph Caryl. W8LHG  |

Congratulations to all the officers/directors. Thanks to all who volunteered to run for the various offices. Special thanks to Lowell Corbin, W8IQB (ex KD8FR) for 8 years of excellent leadership as President!

BTW, the returned ballots represented 25% of the active membership!!!  
Unheard of!

72/73 Buck, N8CQA  
MI-QRP Club Secretary

72/73 Buck N8CQA  
654 Georgia Ave., Marysville, MI 48040-1243  
(810)364-9640 Home, (810)364-8179 Fax, (810)949-0151 Work, (810)949-0203 Wk Fax.  
n8cqa@tir.com, am441@detroit.freenet.org

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: ka7you@juno.com  
Subject: [14954] O'scope usage for beginners  
Message-ID: <19970317.110204.4639.14.KA7YOU@juno.com>

Those of you who have simple 'scopes and don't use them very often, or have never used them, are missing a lot. Duffy's comments are very valid. The best thing in my opinion is to just hook it up, and look at the patterns that you can see at various points on a circuit.

If you have a couple of operational QRP rigs, put them on a dummy load and observe what the oscillator, output, and keying waveform looks like. At that power level, you can't hurt the scope. Later when you have a rig with a problem, you will have some idea what it should look like, and what to expect.

Years ago I operated an auto repair business. We bought a very expensive automotive tune-up scope. I insisted that everyone use it with regularity, so that the mechanics could relate to normal display patterns. When a problem car came in, the patterns displayed would look somewhat different, and although the mechanic may not be able to determine the exact cause right away, he/she could at least see that there was something wrong. That bit of previous use paid for itself many times over, by allowing the mechanic to find minor ignition problems before they caused significant trouble.

This principle applies to any sophisticated test equipment, but because the scope displays so much info at once, it is good to have a mental picture of what to expect. The 'Handbook' has pictures of some common waveforms also.

Get 'em out on the bench, and use them on the stuff that works OK too!

Now, If I can just take my own advise...

7 3,

Rod Johnson KA7YOU CN97AK near Issaquah, Wa. 160M thru 1296 MHz  
NWQRP/#120 ARCI/#7251  
QRP-L/#844

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: timcook@erinet.com  
Subject: [14927] OMNI-C Relay Noise  
Message-ID: <332D34B7.7537@erinet.com>

Thanks to all who responded to my question about the T/R relay in my Omni-C. I may not have explained myself well enough in my first post. I know about the various ways to defeat the amplifier (or other accessory) relay, but my question concerned the actual T/R relay that grounds the receiver during TX. It is the relay located in the small closed box area in the back left corner looking at the radio from the top. It is a reed relay, but it seems quite a bit louder than the current relays in the Omni5/6 or Paragons. With the headphones I use, (they do let some outside sound in), the relay is almost to the point of being distracting as you can hear it make/break during each element of each character. I guess I'm a little picky, but most of today's rigs are almost silent during keying and I thought I would try to make this Omni the same way. The QSK is absolutely great, and without the noisy relay, it would be even better. I do apologize for not being clear in my first posting, and as I said, maybe I'm just too picky!!

Thanks again to all who responded.

Tim, NZ8J

G-QRP 615, ARCI 4099, NE-QRP 50, MI-QRP 115, NORCAL 267

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: ji3m@maxwell.com (James R. Duffey)  
Subject: [14943] Oscilloscope  
Message-ID: <v02130504af5319a49f9b@[192.31.66.229]>

Brad - On Monday you wrote and asked-

"I would like to use my O'scope to test my Special but I don't have the foggiest idea where to start (Got the scope at a swap fest for \$5 and it seems to work okay). Anyone out there with any suggestions? Even a simple one would be fun."

To start with use it like you would a voltmeter. You can actually see the signal rather than just measure the magnitude from a meter. You may wish to



look at the DC line for any noise or ripple if you are using an AC supply. Compare it to the line when powered by a battery. You can see both the AC and DC (offset) value of a signal. You can see gross distortion if it exists. Just hook it up and play with it. - Duffey KK6MC/5

James R Duffey KK6MC/5 DM65  
30 Casa Loma Road  
Cedar Crest, NM 87008

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: "Vic Blackwell" <blackwel@tlcnet.muohio.edu>  
Subject: [14949] Portsmouth Island (and other barrier islands)  
Message-ID: <9703171712.AA27297@tlcnet.muohio.edu>

To everyone contemplating DX expeditions or just plain ol visiting any of the barrier islands on the east coast.

For some years now the islands have been infested with Deer Tick carriers of Lymes Disease. One of the islands north of Portsmouth Island had a 70% infection rate a few years ago.

Caution: Before you go to any of the islands learn about Lymes disease and how to properly identify Deer Tick. Lots of info is available on internet through most any search engine.

Good luck and good DXing.

de Vic AD8K

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: n4js@amsat.org  
Subject: [14956] Re; Questions  
Message-ID: <XFMail.970317095738.n4js@amsat.org>

Thanks again to the group for all the responses. As far as the TAC-1 is concerned, I got contrary, and ordered the ARK4, instead. ONLY because the size was a little smaller, and I plan to use it in my "QRP Afloat" station, so the push-button tuning won't be that much of a problem.

As for 160, I'll start listening a bit more. I think it's getting near the end



I cannot decided if I want it on the roof or in the attic. It would be MUCH easier to put it in the attic for many reasons in my house, but the roof is not out of the question or illegal.

Do any of you used the attic and if so .. is it so bad? My attic is clean and free of metal and wiring and would be perfect for my dipole.

Any comments or suggests greatly welcomed, and thanks in advance!

72 Eric AD4SS Wylie, Texas

PS - To the person who continues to send me annonymous email preaching to me and calling me a murderer every time I post to this Mailing List because of my signature line (Pro-Choice) - GROW UP and GET A LIFE - your messages are not only threatening and harrassing, but un-needed.

Since I cannot answer you directly and private this is the only way I can reach you and I will say only once here - "Please stop sending me this email!!"

Father, Husband, Writer, Pro-Choice, Anti-More-Gun-Control,  
Ham Op (AD4SS), Beer-maker, Mercedes lover, Spelunker,  
South Carolinian, Mac-head, dog-lover, clown, Libertarian, Dreamer,  
My Page: <http://www.why.net/users/ericvia/pershome.html>  
My Mercedes Benz page: <http://www.why.net/users/ericvia/ericmb.html>  
Subscribe to ELECTRIC BACON ezine (free) - ask for details!

-----oOo-----

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: jayboy@psnw.com (Jay & Jackie)  
Subject: [14931] Sierra Power Increase  
Message-ID: <199703171400.GAA08544@sierra.psnw.com>

Question:

I have the notes to increase the Sierra's power including the MRF237 PA change. I'm looking in the new Mouser catalog, and cannot find that item. Any help including a source outside Mouser (if they don't carry it) would be appreciated.

Jay, W6JDB

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
Subject: [14953] Single Letter Beacons  
Message-ID: <199703171859.SAA12369@chuck.dallas.sgi.com>

Gang,

This list corrects an error in previous post for C beacon.  
Thanks to all that emailed and pointed the error in my ways.  
Typing 101 at work. Really, I did buy typing tutor a week  
ago to help me.

40M Beacons heard around 7.039MHz

No data known on power levels or antenna patterns at this time.  
(K5FO: my guess would be QRP levels due to the low strength of  
signals even when heard)

|                                 |         |        |              |
|---------------------------------|---------|--------|--------------|
| C - Moscow, European Russia     | 37.58E  | 55.75N | (in degrees) |
| D - Odessa, Ukraine             | 30.70E  | 46.48N |              |
| F - Vladivostok, Asiatic Russia | 131.85E | 43.14N |              |
| K - Khabarovsk, Asiatic Russia  | 135.10E | 48.50N |              |
| L - St Petersburg, Eur. Russia  | 30.33E  | 59.92N |              |
| M - Magadan, Asiatic Russia     | 150.83E | 59.63N |              |
| O - Moscow, European Russia     | 37.58E  | 55.75N |              |
| P - Kaliningrad, Eur. Russia    | 20.50E  | 54.72N |              |
| S - Archangel, Eur. Russia      | 41.00E  | 64.66N |              |
| U - Murmansk, Eur. Russia       | 33.08E  | 68.97N |              |
| X - Prague, Czech Republic      | 14.43E  | 50.08N |              |
| u - Kholmsk, Asiatic Russia     | 142.08E | 47.66N |              |

\*\*\*\* u is dididahdah \*\*\*\*

Here are some distances in miles from the beacons to  
the city indicated and number in parenthesis is beam  
heading in degrees:

| Beacon | Seattle,WA  | San Fran.,CA | Phoenix,AZ  | Dallas,TX   |
|--------|-------------|--------------|-------------|-------------|
| C      | 5,198 (11)  | 5,864 (11)   | 6,015 (16)  | 5,752 (23)  |
| D      | 5,731 (18)  | 6,377 (18)   | 6,443 (24)  | 6,055 (33)  |
| F      | 4,711 (310) | 5,163 (313)  | 5,781 (318) | 6,353 (326) |

|   |             |             |             |             |
|---|-------------|-------------|-------------|-------------|
| K | 4,341 (313) | 4,818 (316) | 5,424 (321) | 5,969 (328) |
| L | 4,846 (14)  | 5,507 (13)  | 5,636 (18)  | 5,360 (24)  |
| M | 3,383 (318) | 3,904 (322) | 4,484 (326) | 4,986 (330) |
| P | 5,039 (21)  | 5,675 (20)  | 5,723 (25)  | 5,339 (31)  |
| S | 4,625 (7)   | 5,298 (7)   | 5,499 (11)  | 5,325 (17)  |
| U | 4,281 (9)   | 4,952 (9)   | 5,138 (12)  | 4,959 (16)  |
| X | 5,209 (27)  | 5,819 (26)  | 5,801 (31)  | 5,337 (37)  |
| u | 4,135 (309) | 4,578 (312) | 5,198 (317) | 5,788 (324) |

| Beacon | Denver, CO  | Chicago, IL | Buffalo, NY | Atlanta, GA | Anchorage, AK |
|--------|-------------|-------------|-------------|-------------|---------------|
| O      | 5,479 (20)  | 4,969 (28)  | 4,677 (32)  | 5,371 (29)  | 4,342 (355)   |
| D      | 5,879 (28)  | 5,254 (38)  | 4,907 (43)  | 5,578 (39)  | 4,992 (359)   |
| F      | 5,697 (321) | 6,068 (332) | 6,191 (338) | 6,648 (334) | 3,305 (285)   |
| K      | 5,317 (323) | 5,669 (332) | 5,789 (338) | 6,250 (335) | 2,924 (288)   |
| L      | 5,095 (21)  | 4,577 (28)  | 4,287 (32)  | 4,982 (28)  | 4,064 (270)   |
| M      | 4,339 (326) | 4,677 (332) | 4,809 (335) | 5,257 (334) | 1,953 (293)   |
| O      | 5,479 (20)  | 4,969 (28)  | 4,677 (32)  | 5,371 (29)  | 4,342 (355)   |
| P      | 5,157 (29)  | 4,540 (37)  | 4,204 (40)  | 4,883 (36)  | 4,406 (6)     |
| S      | 4,988 (14)  | 4,569 (21)  | 4,328 (24)  | 5,025 (21)  | 3,718 (354)   |
| U      | 4,623 (15)  | 4,206 (20)  | 3,972 (23)  | 4,668 (20)  | 3,438 (358)   |
| X      | 5,223 (35)  | 4,536 (43)  | 4,166 (47)  | 4,824 (42)  | 4,694 (10)    |
| u      | 5,129 (319) | 5,543 (328) | 5,697 (333) | 6,115 (330) | 2,742 (282)   |

We have been getting more reports from AK than anywhere else in the USofA and some people in Central Europe have reported hearing some of the beacons all during daylight hours, which makes sense.

Hope this information is of use to the QRP community. Any errors are the result of this authors typing skills and will be corrected and posted as needed.

FYI

Chuck Adams K5FO          adams@sgi.com    DXCC=11  
[http://reality.sgi.com/employees/adams\\_dallas/](http://reality.sgi.com/employees/adams_dallas/)

From owner-qrp-1@Lehigh.EDU    Mon Mar 17 18:04:47 1997  
 From: gsurrency@juno.com (Gary L Surrency)  
 Subject: [14945] Source for smal S/M caps?  
 Message-ID: <19970317.093523.10310.6.gsurrency@juno.com>

Gang,

I have in my junk box a few Silver Mica (S/M) dipped capacitors that are about half the size of the usual ones. The regular sized ones I have seem

to be rated at 500V, and these little guys appear to be marked 100V.

Does anyone know where to buy more of these smaller S/M caps? They are would be just the thing for QRP radios that don't need the higher voltages. I want to put some in the RF stages of my QRP gear to improve the performance over the typical ceramic discs that are used there, and the larger ones just are too big to fit and "look" right. ;-)

I have checked Digikey and Mouser for them. I couldn't even find ANY S/M caps in the Digikey catalog! Seems they are too digitally oriented to carry much RF type stuff!

Any help would be greatly appreciated! Thanks in advance!

72,

Gary Surrency AB7MY  
S&S TAC-1(40&80m) and ARK30, OHR100 20m, AT-11 (QRO and QRP)  
QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH  
Az ScQRPions

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: PA3ASC@mailbox.hol.nl (Mike Perry)  
Subject: [14961] Subject: Re: Backpacking Antennas  
Message-ID: <199703171858.TAA10679@bonny.hol.nl>

Dan, Cla, FWIW,  
In his book "HF Antennas for All Locations"  
(Chapter 4, 1 Edn.) Les Moxon G6XN is very  
clear about an end-fed wire antenna needing  
a counterpoise and he goes on to explain  
why a classical Zepp will never work well.

D> From: Daniel C Winkler <dwink@juno.com>  
D> Incidentally, the end fed wire is still a dipole. [...snip...]  
D> You need a "counterpoise" to act as the other leg of the dipole.

>From Cla KA0GKC :  
C>You do not need a counterpoise to end feed a half wave dipole. [...snip...]  
C>Examples are the Zepp and J-pole antennas.

Hope this helps.  
[Don't tell oi, tell 'ee]  
73 de PA3ASC

--

Best regards from The Netherlands,

Mike Perry. [e-mail :- PA3ASC@mailbox.hol.nl ]  
=====

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: ed.welch@cheaha.com (ED WELCH)  
Subject: [14924] Visual code learning.....blahhhhh  
Message-ID: <8D41591.00040016F8.uuout@cheaha.com>

-> Also, a little bitty note. If anyone of this group has the code  
-> memorized as a series of those funny characters, you are in serious  
-> trouble. You have to get the ARRL code tapes and start over. You  
-> code speed is not going anywhere until you unlearn the visual  
-> translation and overhead associated with same. I think the ARRL  
-> should remove any such notation from the Handbook or anywhere else in  
-> print. IMHO.

I agree! When I first got interested in ham radio (not so very long ago) one of the first things I did was find a small visual chart of all the characters and tape it to my calculator at work. Memorized them suckers....but that added a "translation speedbreaker". Increasing my speed was murder after learning by "sight"! I think I've pretty well got patch the hurdle now, but from time to time I can still tell that the "visual way" is slowing me down. A very bad "unlearning" process!

72/73

Ed Welch KF4KRV

NorCal Member #???

1st Grand Poobah ScQRPion of Alabama

QRP-L #873 - FISTS #2964

Luverne, Alabama

Crenshaw County - Grid EM61

+-----+  
-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----  
+-----+

> Isn't "time" a 4-letter word? <

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: WD6BOR@aol.com  
Subject: [14962] VOMARC Hamfest, April 26, Sonoma, CA  
Message-ID: <970317132320\_209318382@emout01.mail.aol.com>

Greetings all,

I'm sending this to a number of different sources to get the word out about the upcoming hamfest. Please help us spread the word by getting this information out to whatever informational resources you have available.

This is also an open invitation to all of you to join us for the morning.

Thanks, Darrel

Darrel E. Jones, WD6BOR  
358 Patten Street  
Sonoma, CA 95476  
February 3, 1997  
707-996-4494

Dear Sirs;

Please publish the following announcement for our hamfest and V.E. session in the April issue of your magazine:

Hamfest Announcement  
For immediate release

The Valley of the Moon Amateur Radio Club, W6AJF, is holding it's annual ARRL Hamfest Saturday, April 26,1997, from 8 a.m. to 1 p.m. at the Sonoma Developmental Center, 15000 Arnold Drive, Glen Ellen, California. The hamfest will be held at McDougal Hall on the corner of Wilson and Sonoma Avenues in Sonoma Developmental Center. Admission is free to the hamfest. The event will include a walk-in V.E. exam session, with registration starting at 9 a.m. and testing for all license elements beginning at 10. There will be an electronics swap meet with both indoor and outdoor spaces available. Set up will start at 7 a.m. with spaces renting for \$10. The club will serve a full breakfast from 8 to 10a.m. which will include eggs, pancakes, sausage, juice and coffee or tea for \$5. A pancake only breakfast will be only \$3.50. Forums will include an operating QRP station and display of homebuilt equipment, an AMSAT booth with operating earth station, a beginner's D.F. hunt and more. For a amp and printed directions to the hamfest, send a business size SASE to VOMARC, 358 Patten St., Sonoma, CA 95476. Talk-in will be on 145.35, -600, PL 88.5. For more information call Darrel, WD6BOR at 707-996-4494.

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
Subject: [14915] Wanted 386 Assembler



Message-ID: <199703170524.FAA10997@chuck.dallas.sgi.com>

Gang,

A PD version of 386 assembler on the Internet? I need to write a little code for the PC to control a couple of relays for testing A and B modes on some keyers and PIC chips. Want to do some critical timing analysis and reproducability studies for a whole bunch of keyers etc.

Went surfing some last week and didn't find anything but high dollar stuff on the web, but any help greatly appreciated.

This is the only time you'll ever see me use relays. :-)  
Going to use parallel port to control dits and dahs and duration etc. Dual trace scope to follow what is going on.

Oh, and everything that I have (a PC and a laptop) are 386. :-)  
Got some other higher end stuff but I don't want to write device drivers for such a little experiment. I even have an AMPRO Z-80 system under a pile of stuff, but couldn't find the CP/M disk if my life depended upon it. :-) Some of you remember that puppy I'm sure.

Thanks,  
Chuck Adams K5FO            adams@sgi.com DXCC=11  
[http://reality.sgi.com/employees/adams\\_dallas/](http://reality.sgi.com/employees/adams_dallas/)

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: ad928@freenet.durham.org (Vincent Ferme)  
Subject: [14933] WTB:Joy of QRP.  
Message-ID: <m0w6dJP-0005zuC@freenet.durham.org>

Good Morning,

I am still looking for a copy of the JOY OF QRP. If you have a spare copy :) let me know. My only requirement is that all pages are included :). E-mail me directly, please.

Thank you very much for your attention.

72,

Vince.

--

Vincent Ferme, C.Tech.- VE3VFN -Internet mail:ad928@freenet.durham.org  
Postal address:92102-2900 Warden Av., Scarborough, ON, M1W-3Y8, CANADA

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: jim <kw3u@warwick.net>  
Subject: [14939] xtals  
Message-ID: <332D61A8.7EFE@warwick.net>

Hi Gang;

In continuing shack cleaning, found plastic drawer  
with 2 meter xtals from my old regency hr-312 rig(gave it  
to a local packet group). Anyway I have no use fer em.  
Anyone need any or all?

|        |         |          |
|--------|---------|----------|
| FREQ'S | T146.16 | R146.76  |
|        | T147.13 | R147.73  |
|        | T146.94 | R146.94  |
|        |         | R147.135 |
|        | T147.30 | R147.90  |
|        | T147.42 | R147.42  |
|        | T146.52 | R146.52  |
|        | T146.91 | R146.97  |

Not selling, will mail to those that can use them.

Also an old WW2 or Korean military green box (like size of  
laptop) filled with xtals. from 450kc up thru 30mc..mostly  
two threes and fours . they aren't in ham bands and the case  
isn't ft243...case style is like the old cb plug in ones  
in silver with two prongs. I could make a list if needed of  
the freqs.

Back to cleaning now 73 JIM

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Ed Tanton <n4xy@avana.net>  
Subject: [14920] Yaesu FT-301  
Message-ID: <3.0.1.32.19970317023653.00946c20@tiger.avana.net>

Would the FS: FT301 person contact me-if you have not sold it yet... I  
accidentally trashed the email before I could talk to you. Thanks & pardon  
the BW.

72/73

Ed Tanton N4XY      EMAIL: n4xy@avana.net      TEL: (770)579-3933 V/MBX/FAX  
189 Pioneer Trail  
Marietta, GA 30068-3466

QRP-ARCI#7663      G-QRP#6779      OK-QRP#172      QRP-L#758      AdvRC#140  
NORCAL#1779      NCDXF      SEDXC

Life Member: ARRL      AMSAT      IDRA      INDEXA      QCWA  
URL: Coming Sooner or Later

"Think you can, think you can't: either way you're right!" Henry Ford

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: Wes Jenson <n0ihm@starpoint.net>  
Subject: [14963] RE: 30m fm  
Message-ID: <01BC32F3.BCCE2700@hyginus-14.starpoint.net>

Regarding the "noise" on 30m, I often hear Spanish on what I thought was =  
a=20  
digital part of the band....  
Wes, N=D8IHM      qrp-l 566

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997  
From: mdwatt@usit.net (Marty Watt)  
Subject: [14959] Re: 38S debugging contest?  
Message-ID: <332eb31b.8875976@smtp.usit.net>

On Mon, 17 Mar 1997 05:12:34 GMT, mdwatt@usit.net (Marty Watt)  
wrote:

(Closed circuit to those who sent me replies privately: I'm sending  
this to you via e-mail, blind cc. I try not to reveal private  
correspondence publically without the sender's permission).

Sorry this wasn't clear: \*I\* am writing the consolidated manual  
(actually compiling and editing), KM7W. My original post indicated  
that Ori was writing it, which is not true. My apologies ...

>I'm still debugging the as-of-yet never working 38 Special. I need  
>help, desperately!

>

>In exchange for the help here, if I can get it functioning, I  
>definetly want to do something nice for everyone. I'm considering

>two things, and will probably do both:

>

>1. I have started a "consolidated construction manual", with all  
>the mods laid out in final form, that I will make available to all  
>who request it (I'm doing it in anticipation of building another,  
>when the next run of kits start shipping).

>First problem: no receive audio. The rig has the TiCK installed.  
>It has the 5-watt mod installed. This was probably a mistake, I  
>should have built it stock and then modified it later, after I was  
>sure it was working. Oh well.

>

>When checking with Ori's troubleshooting manual:

>

>>General "dead" Transceiver Procedure

>> (b) check the base of TR1 (2N3904, middle pin) as follows:

>> about 0.6V on receive (key open)

>

>OK

>

>> about 1.5V on transmit (key down)

Per suggestion, I have checked and rechecked around this transistor.

>By shorting pads 9 and 10 to key the rig, the voltage was 0.7V (half  
>that expected voltage)

I ended up replacing the device, and now have 1.5V key down (keyed  
by shorting pads 9/10).

Also verified continuity between all connections on this device. D7  
voltages are as specified in Paul's chart, both receive and  
transmit.

>> (d) check U2/5, U2/6, U4/7, banded side of D1 and D2:

>> 0V on receive (key open)

>> 8V on transmit (key down)

>

>Both OK, except D1 and D2 -- I get 5.15V on the banded end of both  
>on receive, 8.4V on transmit. Paul's chart of voltages differs a  
>bit -- his has 5.0V on D1/D2, and his has the 5-watt mod (like  
>mine). Not sure which is correct at this point. All points got  
>8.4V on transmit, and 0V (actually 0.057V!) on receive.

Haven't gotten any response to this yet ...

I'm also getting regulated supply voltage on D4/D5, 8.2V each. They drop to scant volts on transmit.

```
>>(3) If no sidetone heard, the audio amp might be still OK:
>>  (a) listen with the headphones while touching different places in
>>      the receive path with a metallic object (screwdriver, etc.). You
>>      should hear some noise in the headphones (possibly you'll pick
>>      up a local AM station, due to the high gain):
>>      U5/2, U5/6
>
>U5/2 produces a little audio when "scratched with the point of my
>trusty pocketknife. U5/6 produces nothing. This part is a JRC
>device, marked 5532D, and the catalog number from Mouser is
>513-NJM5532D, Dual Op Amp.
```

Still don't get anything from u5/6. U5/2 gives me an audio hum.

Checked all component values and connections around this device (U5), pin 6. Everything is showing continuity, between R20 and pin 6, the other side of R20 and pin 7. R20 itself measures 270K, as specified. Checked R19 -- had no connection between R19 and pin 6, so I heated the joint a bit. Now, continuity is fine, but still no audio when U5/6 is touched with a metallic object. If I keep the headphones on and check U5/pin 6 for voltage, I get a bit of noise, not much.

Now, I'm getting \*some\* audio, not a tone, but some white noise, on transmit. Rechecked voltages on U1 -- they are (generally) dropping by 0.01V on transmit -- certainly not increasing on pins 1-2 by the 1V or so Paul's chart specifies for the device.

```
>>(4) If you have a general-coverage receiver, "listen" to the 12.0 and
>>  the 22.1 MHz oscillators around those nominal frequencies.
>>  Use a short wire for the antenna of the test receiver and place it
>>  close to the "38 Special" board, while applying power.
>>  Check that the 22.1 MHz signal varies when you change the position
>>  of the tuning pot.
>
>Can't find a signal at 22.1 MHz anywhere.
```

Checked as many of these connections as I can find. Heated a few that looked suspicious, grounded the cans to the pads and removed the wire connections between the cans and ground.

I now have oscillation at 22.1MHz, which varies with the tuning of the radio.

So both oscillators are functioning properly.

To summary: Still no receive audio. U5 and U1 still appear suspect, for unknown reasons. I have \*not\* looked at the connections around U1 (I'm simply tired right now). Both oscillators and the 3904 transistor are working to specs, at least per Ori's debugging sheet.

72 es 73 de=20  
Marty, KM7W

-----  
Jackson, Tennessee e-mail: mdwatt@usit.net  
http://www.public.usit.net/mdwatt  
"The Curmudgeon's Corner"  
NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq  
~~~~~

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: dwink@juno.com (Daniel C Winkler)
Subject: [14894] Re: 38S T1 "Phasing"- - Tutorial (long)
Message-ID: <19970316.184929.4951.7.DWink@juno.com>

On Thu, 13 Mar 1997 13:16:50 +0200 Arjen Raateland writes:
>generally speaking phasing of RF transformer does seem to matter in
>some cases.
>An example is the driver transformer of the Sierra PA

On 14 Mar 1997 13:32:47 -0700 "Mike Schettler"
<Mike_Schettler@qmail4.nba.TRW.COM> writes:
>In hindsight, my choice of terms was poor. ..
>My problem with T1 was due to the 2 turn primary being wound
>*backwards* relative to the secondary.

No, nothing wrong with your phrasing of phasing-
you are using the term correctly. But in this case,
there not should BE any phase difference. That
is why I put phasing in quotes. T1 is not just
any old transformer, it is a *tuned* transformer.
There shouldn't *be* any "backwards" possible.
(In my posting which started this thread, I incorrectly
stated it was a "simple" rf transformer. One could
argue that there exists no such device!)

The 2 turn link couples power (picowatts) from the antenna into the T1/C3+TC1 tank. The tank should merrily re-circulate that power until the NE602 takes it- if not immediately (this half cycle) then eventually (next half cycle- for the "out of phase" connection). The circuit should not exhibit a phase preference. That it does exhibit a preference implies to me that there is another factor at work, and I suspect stray capacitive coupling from C2 to the secondary of T1, bypassing both the rf gain pot P1 and the 2 turn link.

How long does it take for the NE602 to take up the power? That will depend on the Q. The loaded Q of the tank is about 17. This is easily calculated: we know that the input resistance of the NE602 is about 1500 ohms (1995 Handbook, page 15.31). The capacitance in the tank is 150 + (5 to 50); call it 175 pf, which has a reactance at 10.1 MHz of about 90 ohms. Then $Q = 1500 / 90 = 16.7$.

I could as easily have calculated the reactance of T1's secondary. From the Handbook, page 24.6, we find the A (L) of a T37-2 core is abt 42; $18 \times 18 \times 42 = 13608$ (I used 18 because most folks have found that 18 turns works better than 19). That 42 is 42 uH for 100 turns, so we divide by 100×100 , so our inductance is 1.36 uH. Well, my spreadsheet says that to resonate 1.36 uH a 10.1 MHz we need 182 pf, so we are pretty close with our guess about the capacitance. The spreadsheet says the reactance of 1.36 uH at 10.1 MHz is 86 ohms. Our Q will be $1500 / 86 = 17.4$.

This is a pretty high Q. Think of Q as an indicator of how long a tuned circuit will ring after being pulsed with a bit of energy. Someone out there knows the answer to how long it will ring right off the top of their head. I don't, so I'm going to calculate it. (I am guessing tens of cycles).

I can't find the exact formula I need in the Handbook (ALMOST everything you need is in there, but ...), so I will use a formula you remember from your general exam about time constants (Handbook page 6.12).

$T = RC$, where T is the time it takes for the capacitor to discharge to 63.2% of its initial voltage. In our example, $C = 175 \text{ pf}$ and $R = 1500$. $T = RC = (175 \times 10^{-12}) \times 1500 = 0.262 \times 10^{-6}$ seconds. How many rf cycles do we have in that time? Each cycle takes $1/(10.1 \times 10^6)$ seconds or about 0.1×10^{-6} seconds. So with a Q of about 17, it takes $.26/.1 = 2.6$ cycles to lose 63% of the voltage. (I would have guessed many more cycles. It pays to calculate.)

(While I was looking in the Handbook index I found: Transformers, Resonant RF. It says pg. 13.4. Nearby, on 13.7 is a discussion of Tank Q . They give yet another formula for Q : $Q = 2\pi \times (W_{\text{stored}}/W_{\text{load}})$. Hmmmm. Our Q is 17. $17/2\pi = 17/6.28 = 2.7$. Well, well, well. Note that I got that same number in the previous paragraph.) (Not quite the same because I rounded.)

Another way of looking at this is that it takes several cycles for the NE602 to accept the energy from the tank. It isn't all gone in the first half cycle. So why should there be a phase difference?

There are several cases where phasing IS important:

- 1) If the coupling is very tight between two circuits (a low loaded Q), then most of the energy is extracted in a portion of one cycle- essentially as soon as it is delivered from the input source. Then phasing will make a difference. That is what is happening in the Sierra rf driver circuit.
- 2) If there is no capacitor to resonate with the transformer and store the energy during the alternate halves of the cycle, then the phasing will be important.
- 3) If some portion of the signal is taken and fed back to the tank circuit (amplified or not) by a different route (for example, as in an oscillator circuit), then phasing will make a difference.

I think that in the case of the 38s, we have an example of the latter. I believe the observed phasing difference is due to capacitive coupling between $C2$ and the secondary of $T1$. That coupling gives you a second input signal to $T1$, with which the intended route, via the 2 turn link, can compete. Move $C2$ and $T1$ apart, and I bet your phase sensitivity will

disappear. (I will try it on mine when I get there).

Class dismissed. Next week we will discuss the infamous 38s "thump".

73, ; D DWink@Juno.com Dan Winkler N7IVR Seattle, WA

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: NJBIRDMAN <jsielke@pobox.com>
Subject: [14886] Re: Antenna Report
Message-ID: <v03020902af524d57646d@[206.106.174.44]>

>Gang,
>

>
>Oh, the family is doing well in trees. Not to worry about them. They scared
>me to death when the big one jumped out and slid down the fire escape.
>

Glad to hear it. I once went without turning my beam for a whole spring,
because a family of birds had built a nest on the rotator platform.

_ _ _ _ _ _ _ _	John L. Sielke n4js@amsat.org n4js@pobox.com
\ _ / _ _	n4js@n4js.ampr.org NJ Grid:FM29LN
. ' _ _ \ _ _ \	http://www.pobox.com/~n4js NJ-QRP #57
_ \ _ _ _ \ _ _ / _ _ /	QRP-L #884 QRP-ARCI #9328 NE-QRP #507
G-QRP #9544 Norcal #???? QCWA Life Member	

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: dwink@juno.com (Daniel C Winkler)
Subject: [14922] Re: Backpacking Antennas
Message-ID: <19970317.002227.4951.14.DWink@juno.com>

On Sat, 15 Mar 1997 23:20:28 -0500 (EST) Joe Everhart <n2cx@voicenet.com>
writes:

>Even with a ground resistance of 50 ohms, loss will be negligible with
>an end-fed antenna whose radiation resistance is 1000 ohms or more.

Joe,

I think you are confusing the antenna's radiation resistance with it's feedpoint resistance. The two are not the same. The end-fed antenna has a feed-point resistance of 1000 ohms or so. But what is the "resistance" at the center of that half-wave antenna? If you make the antenna out of really skinny (higher ohmic resistance) wire, it will have the same effect on the antenna's efficiency as it would if you were feeding the antenna in the middle for a feedpoint resistance of 50 ohms.

Incidentally, the end fed wire is still a dipole. You have just shifted its feedpoint rather dramatically toward one end. You need a "counterpoise" to act as the other leg of the dipole. You simply CANNOT feed an antenna at its very end- the impedance there is infinite. You need just a little bit of dog to wag that tail!

73, ; D DWink@Juno.com Dan Winkler N7IVR Seattle, WA
-----whom the gods would destroy, they first make proud -----

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: "Claton Cadmus" <aplitech@Spacestar.Net>
Subject: [14932] Re: Backpacking Antennas
Message-ID: <199703171411.IAA27791@Spacestar.Net>

: From: Daniel C Winkler <dwink@juno.com>
:
: Incidentally, the end fed wire is still a dipole. You have just shifted
: its feedpoint rather dramatically toward one end. You need a
: "counterpoise" to act as the other leg of the dipole. You simply
: CANNOT feed an antenna at its very end- the impedance there
: is infinite. You need just a little bit of dog to wag that tail!

ooonnnnk! Wrong!

You do not need a counterpoise to end feed a half wave dipole.

You can easily feed a halfwave wire on it's end, the impedance at that end is a reflection of the "other" end and is usually in the range of a few thousand ohms.

Examples are the Zepp and J-pole antennas.

There was a fine article in Communication Quarterly some months back that explains the details of J-poles and how they work and how the end feed impedance is calculated and what effects it. Great reading.

73 de Cla KA0GKC

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: JEVERHART@cayman.vf.mmc.com
Subject: [14934] Re: Backpacking Antennas
Message-ID: <970317085403.206339d5@cayman.vf.mmc.com>

Dan,

Yes, I did intend to say "feedpoint" resistance. Blame it on a 5 hour drive (without a mobile rig) taking my son back to school!

I know that it is a dipole but avoid saying that when discussing an end-fed antenna to avoid confusion. When I say dipole, I normally specify a center-fed dipole which is how radio amateurs normally think of them. And if I say "Zepp", I mean an (N times) half-wave antenna end-fed with open wire line, not the common but mistaken "center-fed zepp" used to describe a center fed dipole with open wire feedline. The Germans did not use two dirigibles to support a center fed antenna (and it would have required a third to house the transmitter at the other end of the feedline!)

On that subject, you *can* wag the dog without a tail. The Zepp is just such a device. Limited in bandwidth, perhaps, but it does not, in theory require a "tail." On the other hand I always recommend a ground or counterpoise when using a half-wave end-fed wire so that there is a place for the RF current to flow, and the feedline is decoupled. A tail, if you will, for the dog to wag.

72/73,

Joe E., N2CX

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: dwink@juno.com (Daniel C Winkler)
Subject: [14918] Re: Caltech and the NorCal 40A: New EE20 Curriculum!
Message-ID: <19970316.214102.4951.11.DWink@juno.com>

On Sat, 15 Mar 1997 19:45:31 -0500 Bill Meahan <www@wa8tzg.mi.org>
writes:

> The ARRL
> Handbook is great _reference_ material and so is Solid State Design,
> but neither are sufficient to teach one how to go about designing
> one's own equipment.

Horsefeathers! Between them, they contain enough data and cookbook projects to keep you designing and building until you die. All the formulas are there. All the concepts are there. No, they are not complete, but very nearly so.

I want the CalTech book because it is always useful to look at the concepts from another perspective. I do not expect to understand all of the CalTech book any more than I understand all of the Handbook. But if you keep working at it . . .

73, ; D DWink@Juno.com Dan Winkler N7IVR Seattle, WA
-----whom the gods would destroy, they first make proud -----

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [14909] Re: Code Practice on 7.058 Is it live or Memorex??
Message-ID: <199703170507.FAA10934@chuck.dallas.sgi.com>

Gang,

didahdididahdit is " marks

didahdahdahdahdit is '

didahdahdahdit is a special Esperanto character which is a J with a ^ above it.

Would you believe that all of this is in the ARRL Handbook? I knew you would. Chapter 30 of the latest editions.

FYI

Also, a little bitty note. If anyone of this group has the code memorized as a series of those funny characters, you are in serious trouble.

You have to get the ARRL code tapes and start over. You code speed is not going anywhere until you unlearn the visual translation and overhead associated with same. I think the ARRL should remove any such notation from the Handbook or anywhere else in print. IMHO.

Chuck Adams K5FO adams@sgi.com DXCC=11
http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: NJBIRDMAN <jsielke@pobox.com>
Subject: [14893] Re: Expedition
Message-ID: <v03020900af5254d0e07d@[206.106.174.44]>

>The following is from the Ohio/Penn DX News Letter (OPDX):

>

Portsmouth is an UNINHIBITED island located on a
>North Carolina map due south of Ocracoke Island and is in Carteret County
>(the RAREST county is NC!!!)

I didn't know this island was uninhibited! Does that mean our staunch expeditioners will be running around naked, between QSOs? A truly frightening thought.

<pre> _ _ _ _ _ _ _ _ _ _ \ _ / _ _ . ' _ \ _ _ \ \ _ _ \ _ _ / _ _ /</pre>	John L. Sielke n4js@amsat.org n4js@pobox.com n4js@n4js.ampr.org NJ Grid:FM29LN http://www.pobox.com/~n4js NJ-QRP #57 QRP-L #884 QRP-ARCI #9328 NE-QRP #507 G-QRP #9544 Norcal #????? QCWA Life Member
---	--

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: Roger Hightower <n7kt@dancris.com>
Subject: [14897] Re: Expedition
Message-ID: <332CB964.1AAF@dancris.com>

Oh, boy! An expedition to an uninhibited (sic) island. Are you going to have pictures?

--

72/73 de Roger N7KT Mesa, AZ Grid DM43cj
NorCal 40-9er, NC38S, NC-40A, Cascade, OHR Explorer 20, 30M, OHR400,
HW-9

NorCal 1099 CoQRP 176 QRP-L 62 G-QRP 9081 ARCI 8946 NE-QRP 383

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: ka0yos@arn.net
Subject: [14904] Re: Expedition
Message-ID: <199703170410.WAA22227@arnet.arn.net>

>
>MAJOR QRP IOTA DXPEDITION (Rare County)! The Knightlites, a QRP club
>...
>(the RAREST county is NC!!!) They WILL be running QRP with 4 stations on
>...

Do people really look for counties / QRP? I've got several rare ones real close (Carson, Roberts, Briscoe and Deaf Smith in Texas). I could go out and about if some one is interested.

72,
Joe ka0yos

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
Subject: [14951] Re: Expedition
Message-ID: <199703171720.LAA17788@multi13.netcomi.com>

> The Knightlites, a QRP club
> consisting of Andrew/K4HQ, Dave/WA4NID, Paul/AA4XX, Steve/AA1BK, Tim/N4EKP,
> John/WB40FT, and Bob/AE4IC, will be going to Portsmouth Island.
Portsmouth is an > UNINHIBITED island located on a

Now I know what the Knightlites REALLY do.

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [14910] Re: Final Fox
Message-ID: <199703170510.FAA10953@chuck.dallas.sgi.com>

Cam,

-2 points for each CA worked by another CA!!

Have called the HAARP facilities and asked that they move the transmitter up in frequency and in power and move the angle S.

: -)

Good luck and do work a TX station once in a while. We are down in the dumps now that you guys have one the big one.

dit dit

Chuck Adams K5FO adams@sgi.com DXCC=11
http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [14911] Re: Final Fox
Message-ID: <199703170510.FAA10955@chuck.dallas.sgi.com>

Ok, make that won the big one.

Chuck Adams K5FO adams@sgi.com DXCC=11
http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: "Marshall Emm" <mgemm@mtechnologies.com>
Subject: [14964] Re: For your ease: Web Page help.
Message-ID: <199703171745.KAA26966@lynx>

>> It is called HTMLdrv.exe from the PowerToys
guys over at Microsoft. What it does is allow you to
print a text file as a HTML file. What does this mean?
<<

Not that I don't trust Microsnot [g] but there's a much easier way to do it-- don't format it as HTML at all. Put in the web site's directory as a .txt file and put a link to it on your page. Browsers will just display the whole file as if it had been formatted as HTML. For an example of how this works, check out the member listings on CQC's home page: <http://www.mtechnologies.com/mthome/cqc.htm>.

See, it DOES have something to do with QRP, sort of.

73

Marshall Emm
AA0XI/VK5FN

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: Scott Cranston <cranston@zk3.dec.com>
Subject: [14930] Re: Hamcom interface & software
Message-ID: <9703171349.AA04054@alpha.zk3.dec.com>

For HamComm info see: <http://www.accessone.com/~tmayhan>

Scott
KB1NW

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: john andrews <jm165723@eee.org>
Subject: [14895] Re: HM-9 Help and HamFest Goodies
Message-ID: <332CB646.790@eee.org>

john andrews wrote:

>

> Bill Myers wrote:

> >

> > Snip...

>

> Hi Bill and All:

>

> Swapmeets take a lot out of me. Takes a while to get back my sea-legs.

>

> Enjoyed the DeVry(Nr. LA Fairgrounds in So Cal), sold very few items,
> but had a chance to give lots away. Mostly boat-anchor stuff.

>

> Stas, of A&A fame, was in attendance and appears to be closing out
> much of his slower stock. One of the nicest items was a verticle
> antenna that is 18" to 24" inches when folded up and expands to
> 20 feet. It's spring loaded and you just flip it out. (Those of
> you who served in the military- it's like the prc-25/prc-77 ant.)

>

> He had great deals on a great many items. You might try a short
> note to him WITH a list of wants by snail mail.

>
> Ed Matsuda was there with his big red truck full of tech manuals and
> I got mine for my HP scope. Tek, HP, and military nomenclature stuff
> for test gear...he has it all. If any interest is shown will post
> adr. These are quality bound re-prints...No junk.
>
> With so many swap-meets you tend to get a little jaded.
>
> Best gag: mobile mike with a pacifier glued to the front.
>
> 72, John- N5INZ\6

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: Philip Karras <ke3fl@access.digex.net>
Subject: [14935] RE: I love CW because...
Message-ID: <Pine.SUN.3.96.970317094617.13796B-100000@access5.digex.net>

Because it's relaxing. :-)

Have you heard of FISTS? It's an organization of people who love cw.
I've just joined. If you want info let me know.

72 & 73 de KE3FL/Phil
:-)

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: "Edward A. Stag1" <edstag1@worldnet.att.net>
Subject: [14908] Re: ORDER
Message-ID: <19970317045523.AAA25026@LOCALNAME>

At 12:55 PM 3/16/97 +0000, you wrote:

>Ed,
>
>I never got a chance to thank you for pointing out the error in my
>return mail address.
>
>The problem was on the ISP's server. I am not sure how the letter got
>deleted, but its fixed now.
>
>Now on to the Web Page. I have discovered a couple of small problems
>there. I thought computers were supposto make for less work.
>

>73/72

>

>Bob

>HB Electronics

Thanks for your note, Bob. I did see your post to the list and didn't expect any further word on it. Sorry, but I missed any problem on the web page...thought it was ok.

But I did want to tell you what a pleasure it was opening my order...everything was neatly bagged and clearly labeled. I simply transferred them directly to my parts bin...a shoebox stacked with envelopes. It makes homebrewing a greater pleasure when you don't have to worry where your next part is coming from.

Am I a satisfied customer, or what !

72/73 Ed

Ed Stagl N2GVS edstagl@worldnet.att.net

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997

From: Vic Rosenthal <rakefet@rakefet.com>

Subject: [14907] Re: Roof or Attic??

Message-ID: <332CD045.2A4C@rakefet.com>

Eric Via wrote:

>

> Dear Fellow QRP hobbiests,

>

> I am in the process of putting together a 40m dipole for
> my newly aquired HW-8.

>

> I cannot decided if I want it on the roof or in the attic.
> It would be MUCH easier to put it in the attic for many
> reasons in my house, but the roof is not out of the question
> or illegal.

>

> Do any of you used the attic and if so .. is it so bad? My
> attic is clean and free of metal and wiring and would be
> perfect for my dipole.

I doubt that there would be any difference if it were immediately under

or over the roof. However, the higher you can get it, the better; and if it were 8 feet above the roof it would probably be better (at least from the pov of noise pickup and RFI) than if it were a foot underneath it.

Vic K2VCO

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: dwink@juno.com (Daniel C Winkler)
Subject: [14917] Re: stranded wire at rf
Message-ID: <19970316.214102.4951.9.DWink@juno.com>

On 15 Mar 1997 15:06:15 GMT JC_Smith@designlink.com (JC Smith) writes:

>Interesting. I wonder why it is that there does seem to be a
>difference when
>the wire is being used as the center conductor in coax cable. Eg: the
>difference in performance between LMR-400 and LMR-400 ultra flex. The
>stranded wire should have more surface area and thus better
>performance, but
>the opposite is apparently true. Then when you go from the 7 strand to
>the 19
>strand center conductor (if you can find it) the performance
>supposedly goes
>back to near that of the solid wire.
>

I believe the difference between stranded and solid wire has to do with the geometry of the surface. With 7 strand cabl there are deep clefts in the outside surface of the "wire", formed by the individual strands. The skin effect is caused by the magnetic field induced in the wire, and it averages out for the whole wire. RF current doesn't want to flow in those clefts (anthropomorphic RF), as they are below the "skin". The rf current is forced to flow on a smaller surface formed of just the outermost portion of the individual strands. In contrast, the solid conductor offers a uniform surface, and the electrons jostle eachother about, but manage to share a larger surface area (sorry, I anthropomorphize everything. I sometimes even name the electons. Look! There goes Jack. And Jill. If just a few more of their friends, cousins and brothers go by, why I'll have a picoamp!)

With 19 strand wire, the clefts are not as deep, and the "wasted"

surface area is less.

I think if you re-read Cecil's comment carefully, he said there is no *significant* difference when stranded wire is used as an antenna. I think the primary reason is that you are dealing with an effect that is swamped by the higher radiation resistance of the antenna. To be efficient, an antenna should not lose much of its power as heat due to wire resistance. If our (solid) wire resistance is 2 ohms, but antenna radiation resistance is 50, we're only losing 4% as heat. If we put up stranded wire, and the resistance rises to 3 ohms, we will have a 6% loss. I defy you to notice the difference. It is not significant. Doesn't mean the difference isn't there!

Disclaimer: I am NOT an expert. I am guessing at the above explanation. I do not have a firm grasp of the physics involved. Induced magnetic fields account for the "skin effect", and are probably the cause. But my initial thought was that the electrons in the clefts repel each other, forcing more of the current onto the outermost portions of the individual strands. Both notions seem possible. Who knows what dreams an electron has??

73, ; D DWink@Juno.com Dan Winkler N7IVR Seattle, WA
-----whom the gods would destroy, they first make proud -----

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: JC_Smith@designlink.com (JC Smith)
Subject: [14926] Re: stranded wire at rf
Message-ID: <295493629.39554370@designlink.com>

Hi Dan,

Thanks for your thoughts on the differences between solid and stranded wire at RF. What you say seems reasonable, but I'm no expert either.

Another thought on the topic is that when we are talking about wire antennas we are usually talking about lower frequencies (HF), but when we talk of the difference in performance of cable we are usually referring to the higher frequencies. I believe these skin effects come into play more as the frequency goes up. There probably is a difference in performance of wire antennas, but at the frequencies involved (as you say) it is not significant enough to be considered.

73 - JC,k0hps@amsat.org

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: "Chuck (Jack) Hawley" <c-hawley@uiuc.edu>
Subject: [14899] Re: Toroid substitution
Message-ID: <332CBA89.67A2@uiuc.edu>

ka7you@juno.com wrote:

>
> As mentioned earlier, I failed to heed the warning in the LDG autotuner
> instruction manual. I dropped one of those little T50-2 cores. I
> thought I had a replacement in the junk box, but alas, it is a T68-2. I
> don't have any previous experience with toroids, so....
> I have 'looked in the book' and find that the T50-2 shows 50uh per
> 100 turns, and the T68-2 specs at 57uh per hundred turns. I have the
> room for the bigger core, so I'm going to wind 29 turns on the T68-2 core
> instead of the 33 turns on the T50-2 as originally specified. $33/100 \times$
> $50 = 16.5\text{uh}$ $29/100 \times 57 = 16.53\text{uh}$
> Am I doing this correctly, or am I missing something? It almost
> seems to simple.
> 7 3,

It is. The ratio of the turns squared is equal to the inverse ratio of
the AL's. So $N2/N1 = \sqrt{AL1/AL2}$.

$N2 = \sqrt{AL1/AL2} * N1$

$N2 = \sqrt{49/57} * 33 = 30.6 \text{ turns}$

Chuck, KE9UW

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: dwink@juno.com (Daniel C Winkler)
Subject: [14921] Re: twisted-pair answer
Message-ID: <19970317.002227.4951.18.DWink@juno.com>

Thanks, Glen!

I was really just teasing you about measuring it. But
the info may come in handy if / when I need to make a
good balun.

OK, Ed Hare or Zack Lau, you guys have anything to do with publishing the Handbook? Here's another thing that needs correcting. That table about impedance of twisted wires should define "twist" as bumps per inch, or half turns.

73, ; D DWink@Juno.com Dan Winkler N7IVR Seattle, WA

-----whom the gods would destroy, they first make proud -----

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: [14960] Re: Wanted 386 Assembler
Message-ID: <GfEVRAA7ValzEwtt@lfheller.demon.co.uk>

In message <199703170524.FAA10997@chuck.dallas.sgi.com>, Chuck Adams
<adams@chuck.dallas.sgi.com> writes

>

>Gang,

>

>A PD version of 386 assembler on the Internet? I need to write a
>little code for the PC to control a couple of relays for testing A
>and B modes on some keyers and PIC chips. Want to do some critical
>timing analysis and reproducability studies for a whole bunch
>of keyers etc.

[deleted]

Look for CHASM - cheap assembler - on the Simtel archive. It only produces .com files, but it works quite well. A86 is another similar one you should be able to find on Simtel.

Leon

--

Leon Heller

Amateur radio callsign: G1HSM

Email: leon@lfheller.demon.co.uk WWW: www.lfheller.demon.co.uk

Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

From owner-qrp-1@Lehigh.EDU Mon Mar 17 18:04:47 1997

Bethel, CT; FN-31-HJ

ARCI#9253; QRP-L #574
NEQRP#511; ARRL; QCWA

From owner-qrp-l@Lehigh.EDU Mon Mar 17 18:04:47 1997
From: Dan Hogan <dhhogan@lightside.com>
Subject: [14958] Re: [BitBucket] \$\$\$ Extra MONEY\$\$\$
Message-ID: <3.0.16.19970317073659.35af9dce@mail.lightside.com>

If you browse commercial web sites you are leavibg yiurself open to SPAM.
Some commercial web sites sell Email addresses. I didn't have a SPAM
problem until I visited a certain cities location.

72/73

Dan Hogan WA6PBY QRP-L #558, CQC #340, NorCal #1806,
dhhogan@lightside.com ARRL, ARCI #3847, G-QRP #9533, FISTS #2949
Lat. 34d 03.5'N Lon. 117d 56.0'W Grid: DM84wc